Prognostic value of miR-155 in individuals with monoclonal B-cell lymphocytosis and patients with B-chronic lymphocytic leukemia

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Supplementary Results: miR-16 as plasma normaliser in samples from patients with chronic lymphocytic leukemia (CLL)

The fact that plasma levels of miR-16 were consistently high in patients with CLL is surprising given the location of the gene in the 13q14 deleted region[1] and the confirmed tumor suppressor role of the miR-15a/16-1 cluster[2]. Therefore, we obtained malignant CD5$^+$/CD19$^+$ cells collected along with the plasma from an independent set of 51 patients for which fluorescence in situ hybridization (FISH) panel of probes identified detectable defects, including 9 with known 13q deletion status. We compared miR-16 expression in paired plasma and malignant cell samples from a set of samples independent of the groups A to E. We found that the malignant cells with 13q deletion had significantly lower levels of miR-16 expression than did cells from other patients with a normal chromosome 13 (n = 42; P = 0.04). This confirms previously independently reported work [1]. However, the levels of expression for miR-16 in the "paired" plasma samples were similar between the 2 groups regardless of 13q deletion status (**Supplementary Figure 7)**. This further supported the use of this miRNA as an internal control for the plasma study, and also confirms that for samples from different sources, even from patients with the same disease (such as cells or plasma from patients with CLL), different genes can have normalizer properties.

1.   Calin GA, Dumitru CD, Shimizu M, et al. Frequent deletions and down-regulation of micro-RNA genes miR15 and miR16 at 13q14 in chronic lymphocytic leukemia. Proc Natl Acad Sci U S A. 2002;99(24):15524-15529.
2.   Klein U, Lia M, Crespo M, et al. The DLEU2/miR-15a/16-1 cluster controls B cell proliferation and its deletion leads to chronic lymphocytic leukemia. Cancer Cell. 2010;17(1):28-40.

Supplementary Figure 1. Normalizer 5S RNA Ct values in samples from groups A and B. The normalizer was constantly expressed at approximately 19 cycles in both sets of samples. MBL, monoclonal B-cell lymphocytosis; CLL, chronic lymphocytic leukemia.
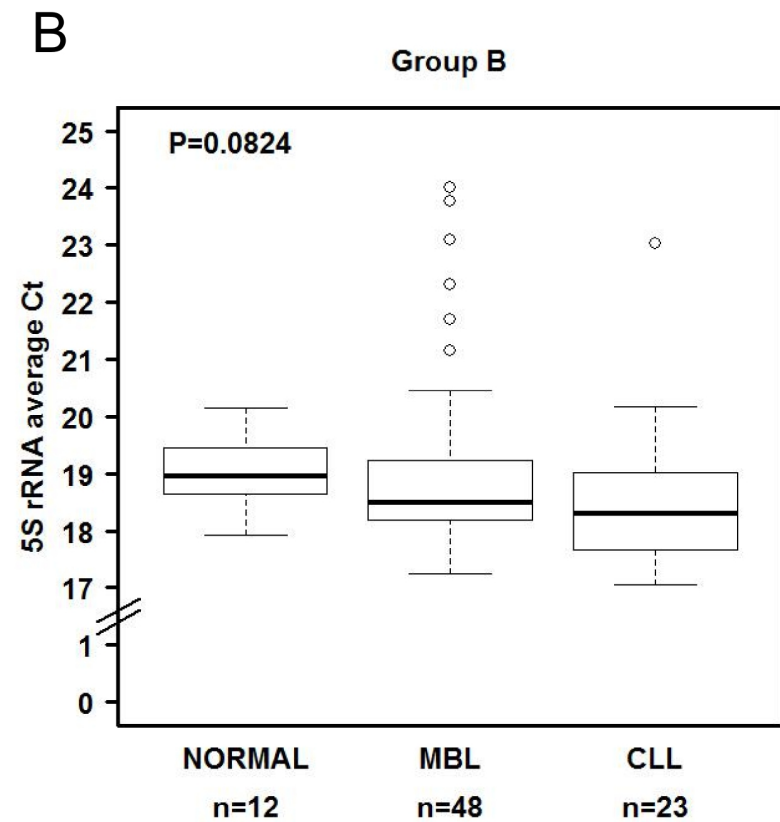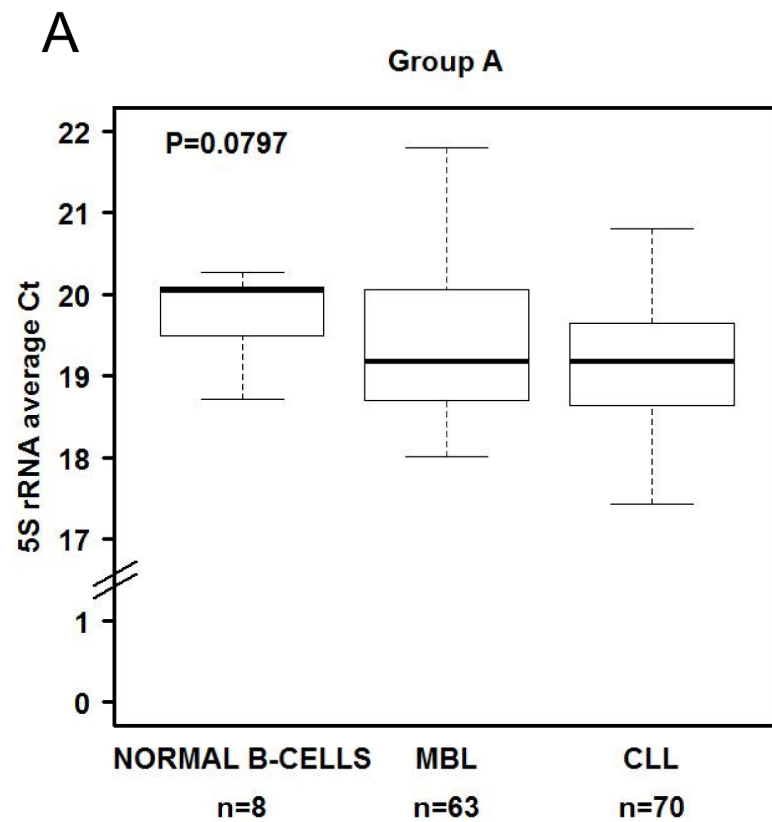
Supplementary Figure 2. miR-15a, -16, and -21 levels in normal CD19^{+} B-cells, monoclonal B-cell lymphocytosis (MBL) cells, and chronic lymphocytic leukemia (CLL) cells, groups A and B.

A

B
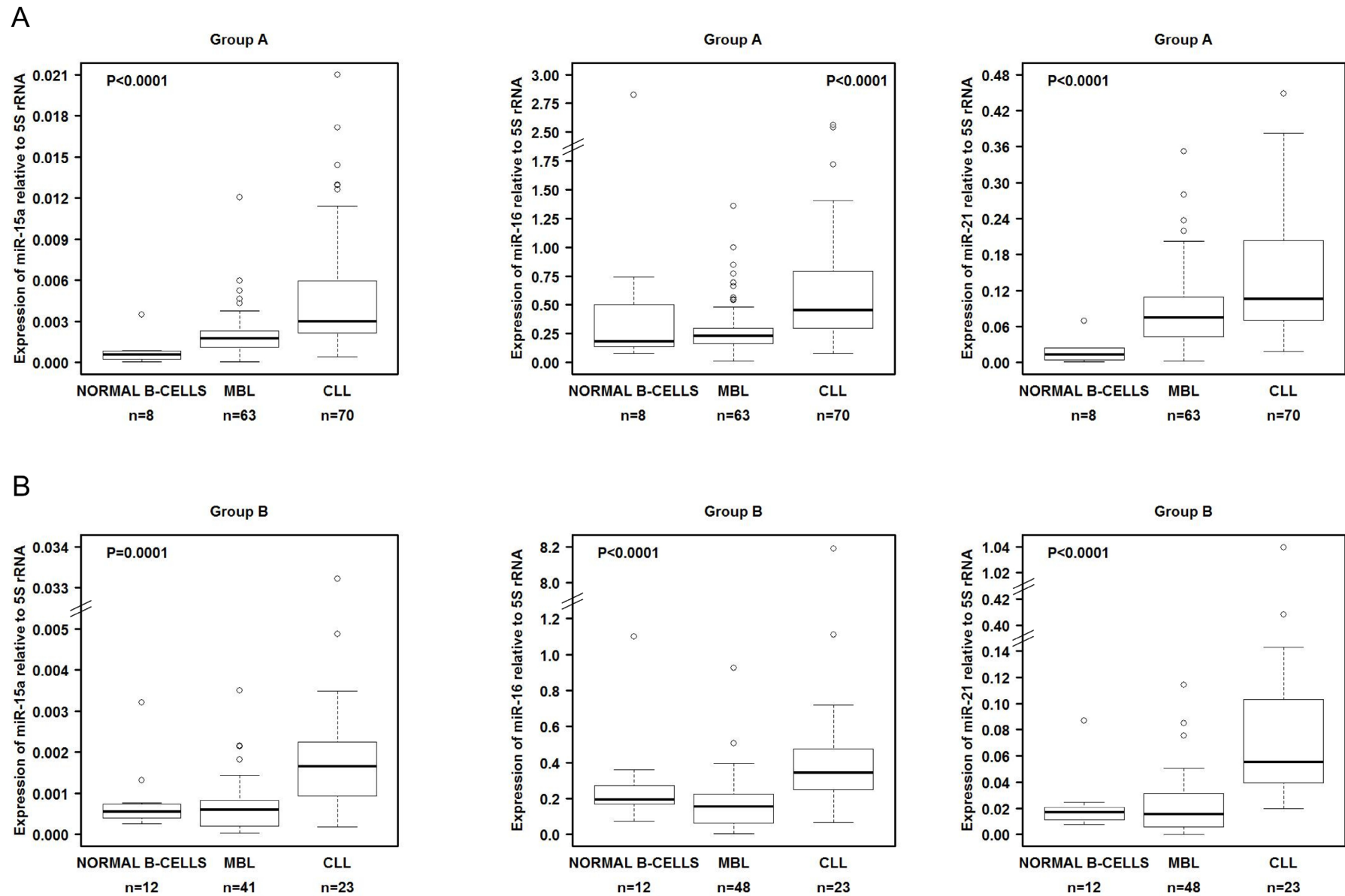
Supplementary Figure 3. Relationship between levels of miR-155 and lymphocyte count in monoclonal B-cell lymphocytosis (MBL) cells. MBL samples were grouped in sextiles according to absolute lymphocyte count, and the sextile group with the highest level of absolute lymphocyte count (MAXALC) was compared with the lowest sextile group in both groups A and B.
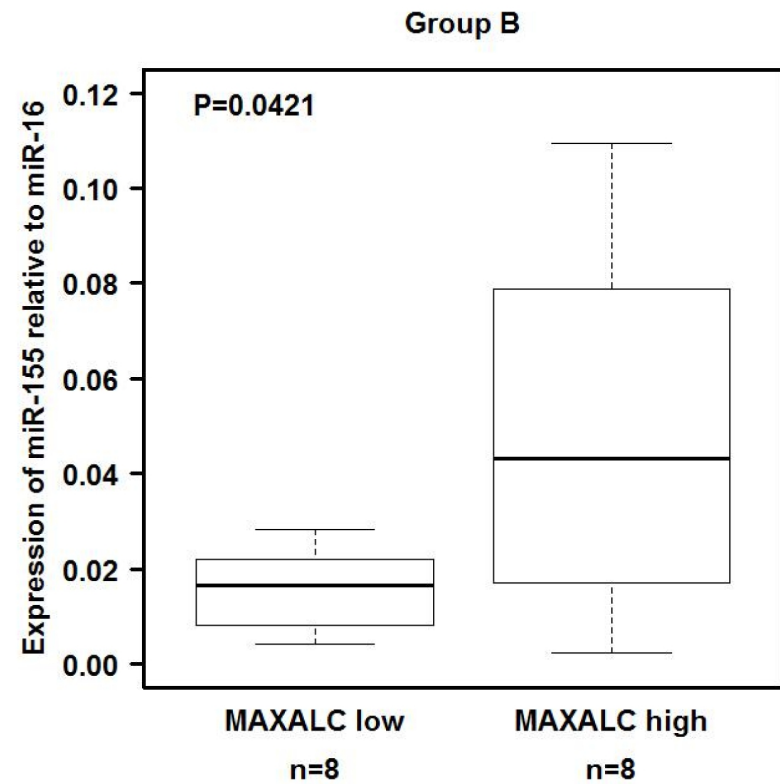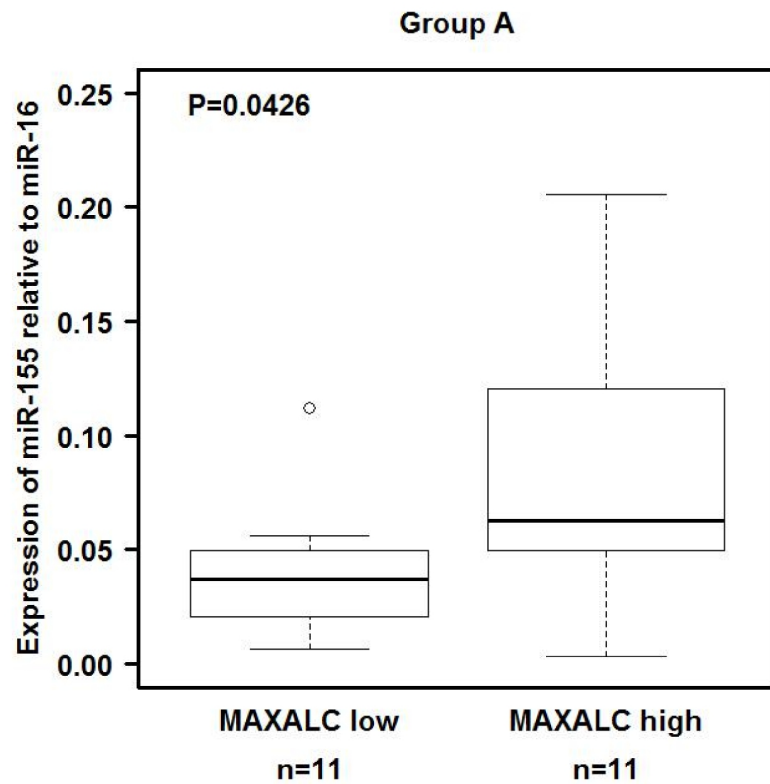
Supplementary Figure 4. miR-21 expression is correlated with overall survival (OS) in patients with CLL in groups A and B. We performed the data analyses for all patients together to reach a number (n = 93) similar to that reported by Rossi S, Shimizu M, Barbarotto E, et al. microRNA fingerprinting of CLL patients with chromosome 17p deletion identify a miR-21 score that stratifies early survival. *Blood* 2010; 116(6): 945-952.
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52	49	44	18	3	miR-21 HIGH
41	36	35	24	11	miR-21 LOW
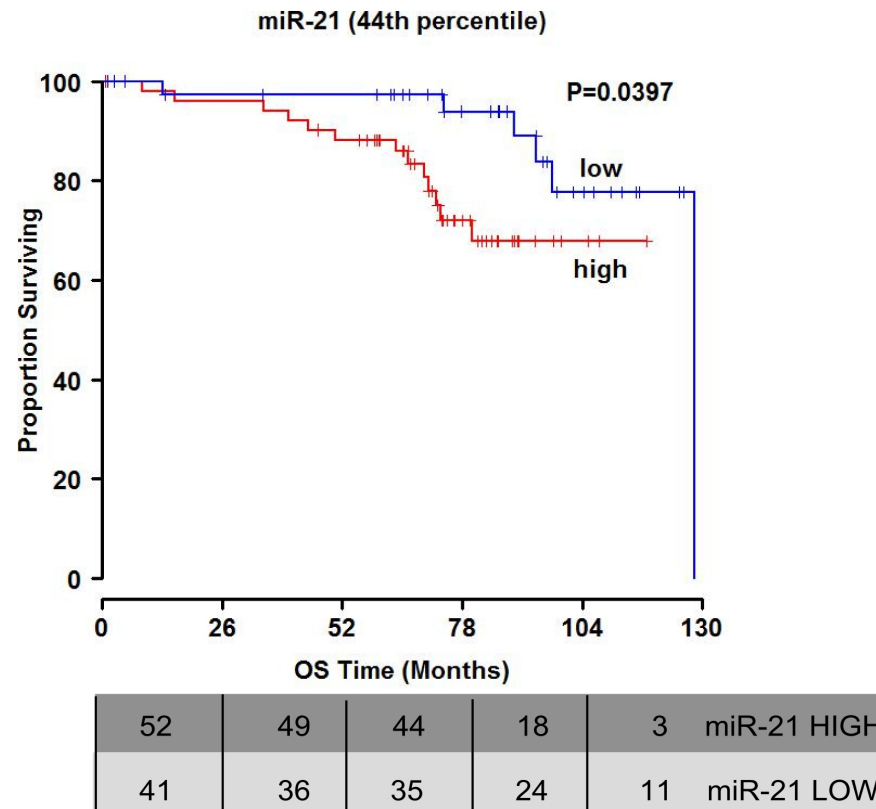
Supplementary Figure 5. miR-16 and miR-155 expression in microvesicles (MVs) from individuals with monoclonal B-cell lymphocytosis (MBL) and chronic lymphocytic leukemia (CLL). We used U6 snRNA as a normalizer. MVs were isolated from "platelet-free plasma" obtained from 1 individual with MBL, 1 patient with Rai stage 0 CLL, and 3 patients with CLL of higher stages.
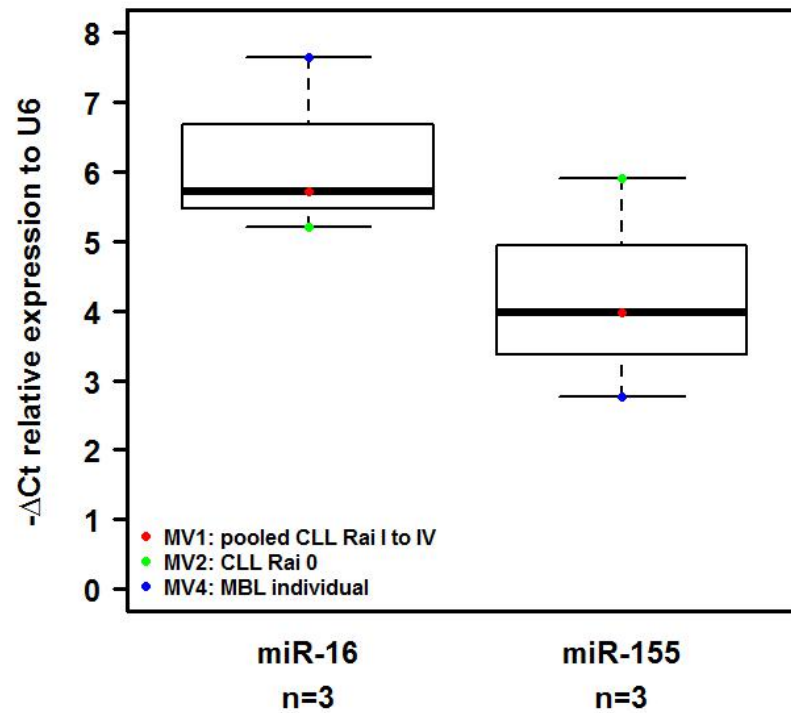
Supplementary Figure 6. Normalizer selection. A. Average Ct expression for miR-16 and miR-192 measured by qRT-PCR for the 143 group A patients treated with fludarabine, cyclophosphamide, and rituximab. A Ct threshold of 35 was used to determine whether a miRNA was expressed (Ct < 35) or not expressed (Ct ≥ 35). About 10% of samples did not express miR-192, whereas all the samples expressed miR-16. **B.** miR-16 is not differentially expressed in pretreatment samples of group C patients with different response levels (CR, complete response, NPR, nodular partial response, PR, partial response, and NR, no response).
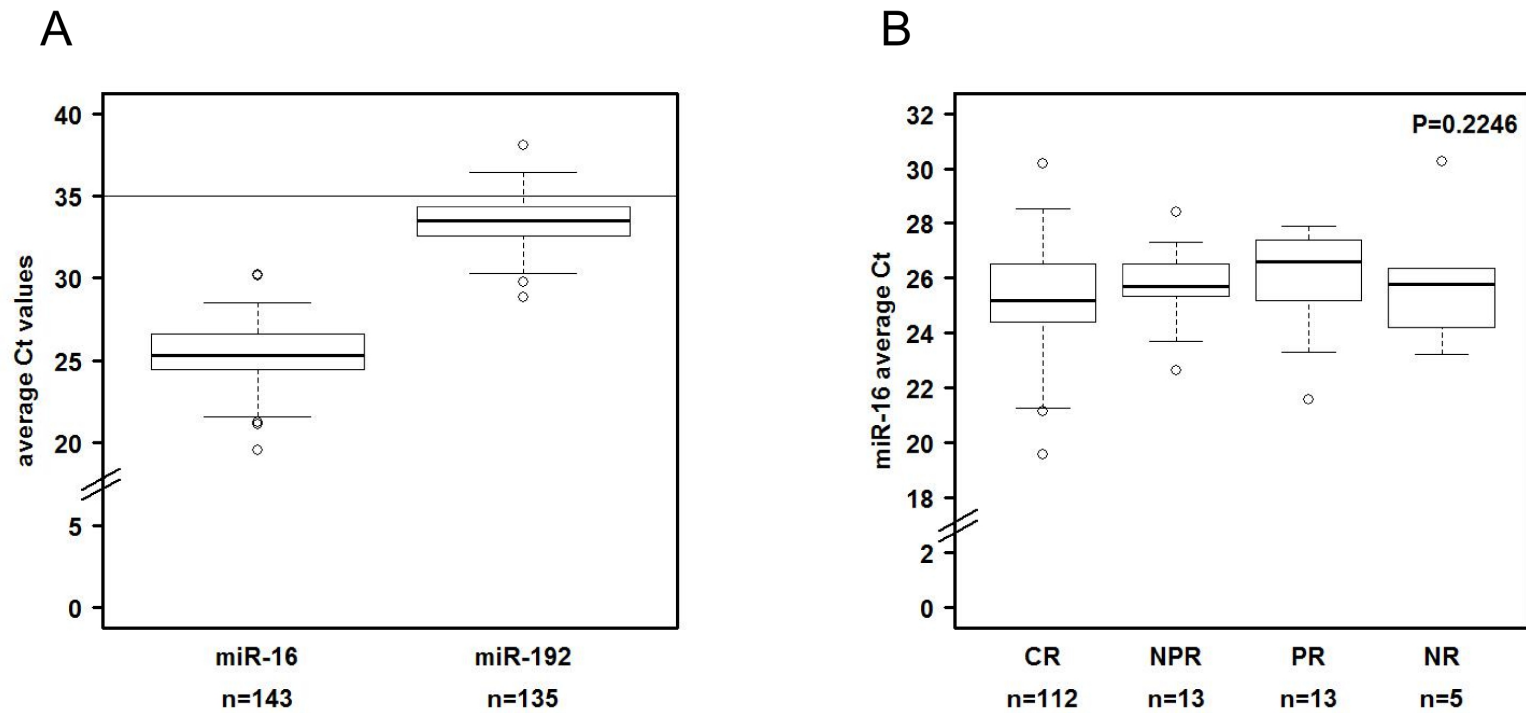
Supplementary Figure 7. miR-16 as a normalizer in samples from groups D and E A. miR-16 is expressed at equivalent levels in pretreatment leukemic samples from group D patients treated with fludarabine, cyclophosphamide, and rituximab in whom a complete response (CR) will be achieved, compared with partial (PR) or no response (NR). **B.** miR-16 is also expressed at equivalent levels in pretreatment samples of group E patients treated with lenalidomide in whom CR will be achieved, compared with other response levels (PR, NR, or NPR [nodular partial response]).
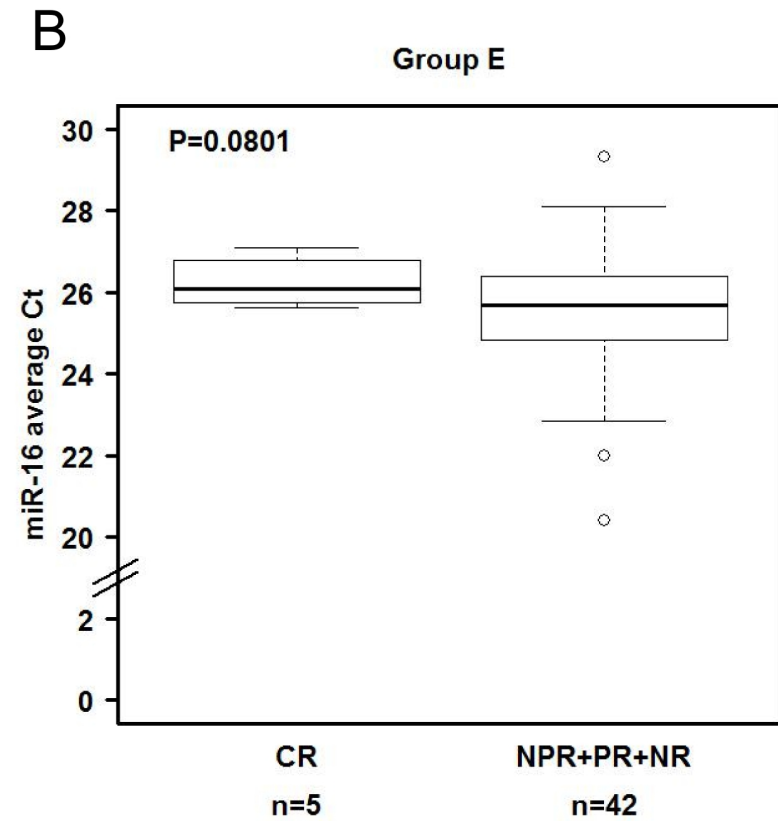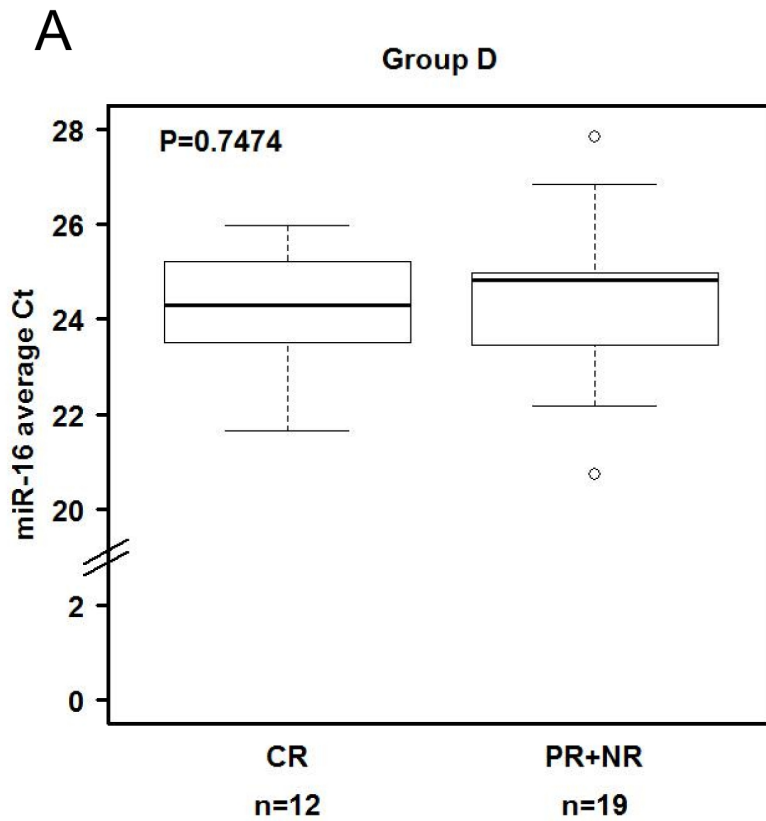
Supplementary Figure 8. miR-16 as a plasma normalizer. A. miR-16 is expressed at lower levels (higher Ct values) in chronic lymphocytic leukemia (CLL) cells with 13q deletion compared with CLL cells with normal chromosome 13q. **B.** miR-16 is not differentially expressed in CLL plasma with 13q deletion compared with CLL plasma with no detectable defects in chromosome 13q. The results were obtained in "paired" samples from the same set of 51 patients at MD Anderson that were independent of groups A to E.
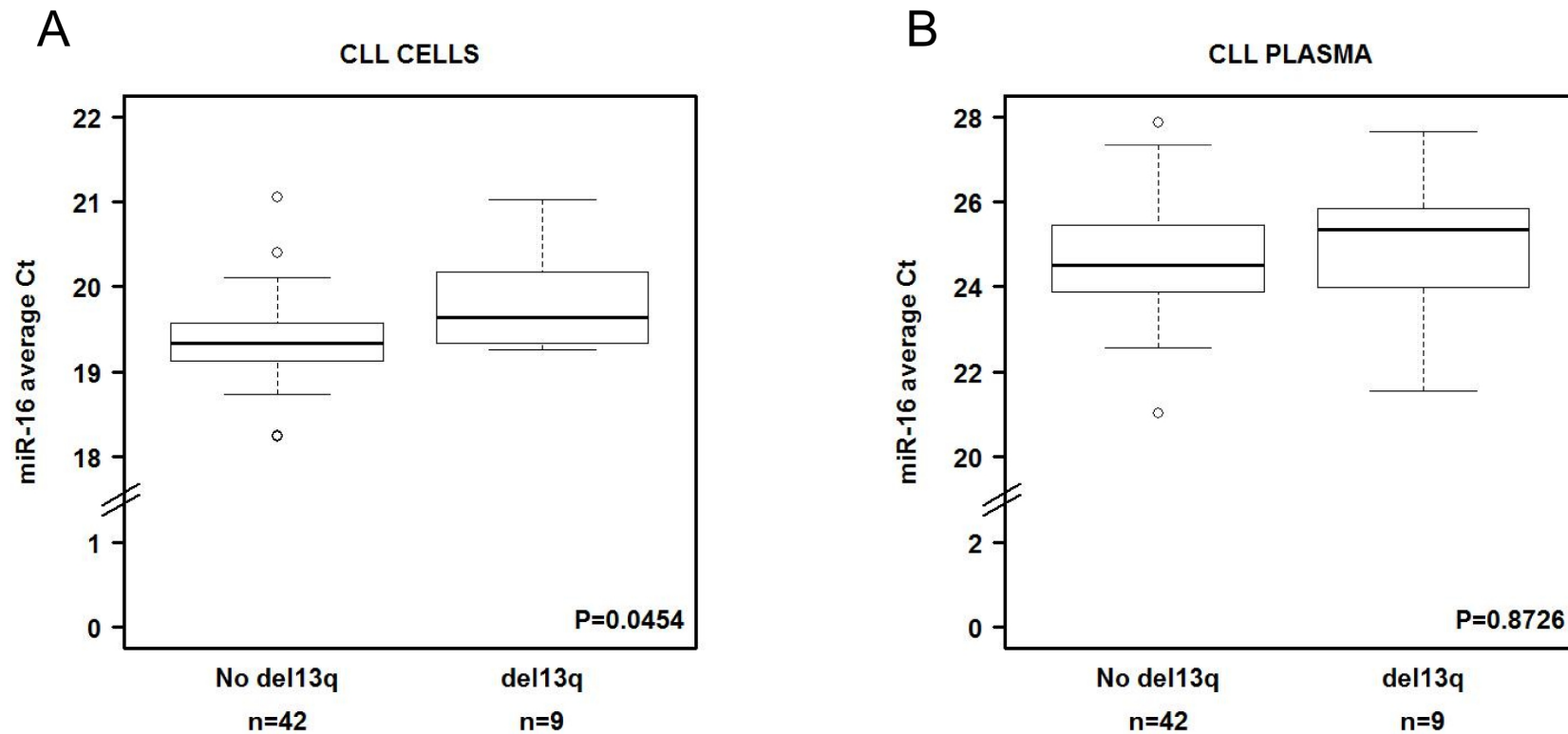
Supplementary Figure 9. Relationship between relative miR-155 expression levels in plasma and overall survival for patients who experienced a complete response (CR) in group C (n = 112). Kaplan-Meier survival curves according to relative expression levels of miR-155 in plasma are presented.
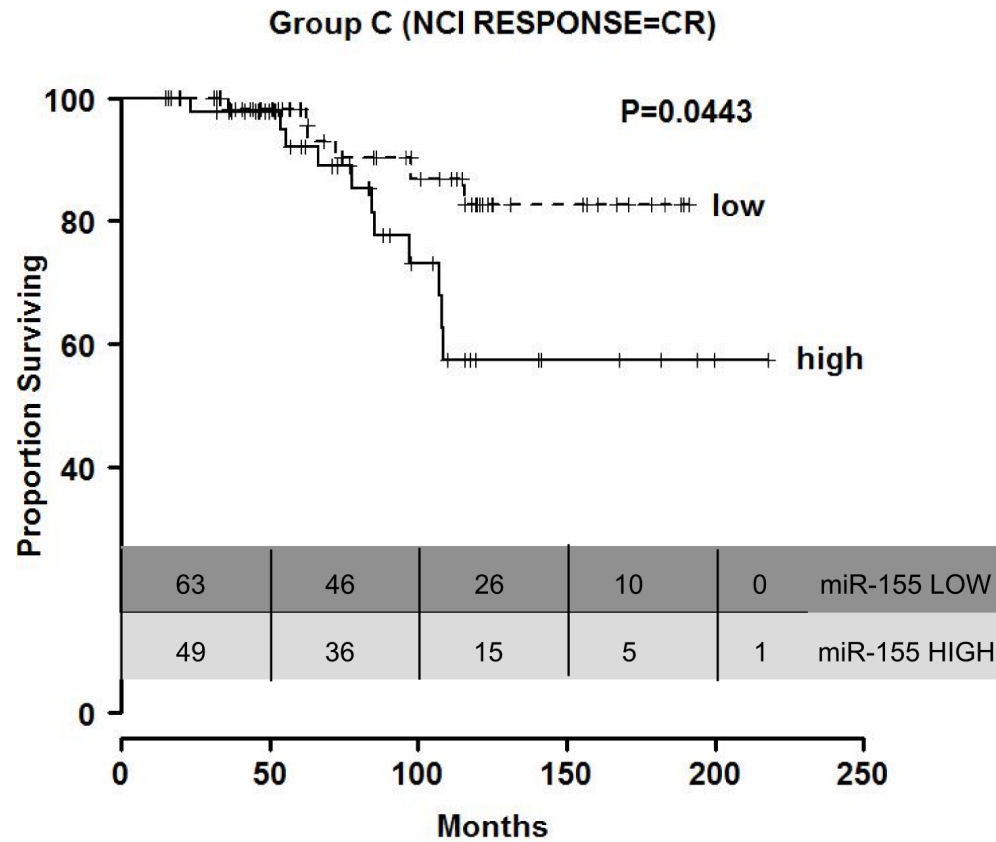
Supplementary Figure 10. Correlations between plasma miR-155 levels detected by qRT-PCR and FISH abnormalities in CLL plasma samples from group C. The P value was calculated using the Kruskall-Wallis test.
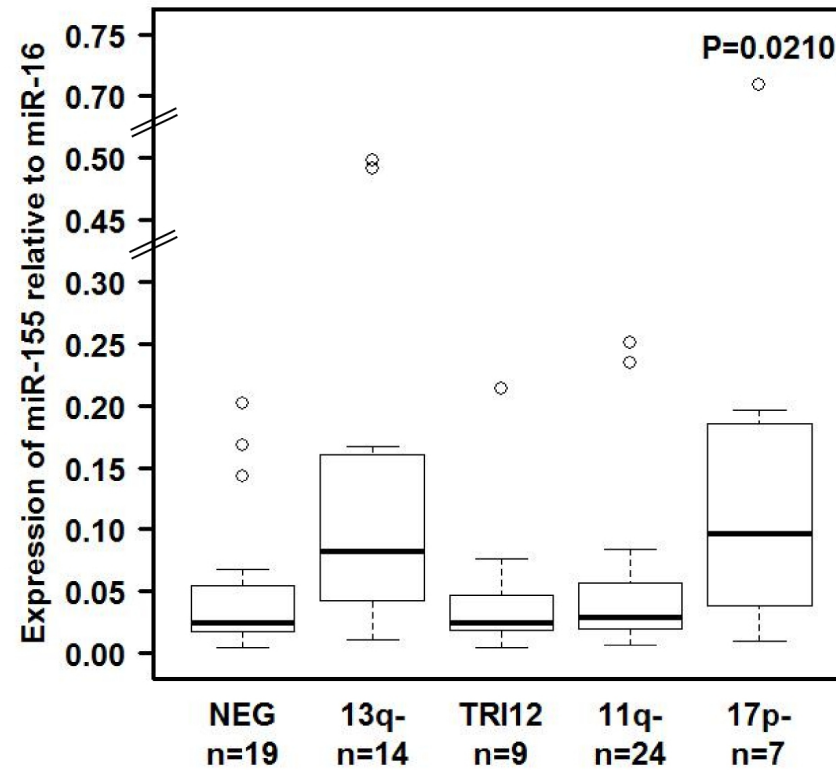
Supplementary Table 1. Clinical characteristics of the patients from Mayo Clinic (groups A and B).

ID	TTFT (months)	Treated/ Untreated	FISH	VH	ZAP70	RAI	OS (months)	Status	ALC	ALC
				Patients with MBL						
MBL 001	19.06	Not treated	NEG	MUT	ND	0	121.69	Alive	8.06	8.06
MBL 002	64.1	Treated	TRI12	UNMUT	NEG	I	137.27	Alive	7.67	7.67
MBL 003	33.48	Treated	NEG	UNMUT	ND	I	130.07	Alive	7.88	7.88
MBL 004	120.02	Not treated	13q-	MUT	NEG	0	123.47	Alive	8	8
MBL 005	1.02	Not treated	ND	MUT	ND	0	106.65	Alive	5.11	5.12
MBL 006	97.84	Not treated	ND	MUT	ND	0	119.39	Alive	7.16	8.77
MBL 007	0.43	Not treated	ND	MUT	ND	0	4.37	Alive	6.92	6.92
MBL 008	63.94	Not treated	ND	MUT	ND	0	69.03	Dead	6.3	11.39
MBL 009	36.37	Not treated	ND	ND	ND	0	92.19	Alive	5.59	5.59
MBL 010	7.85	Not treated	ND	MUT	ND	0	71.92	Dead	6.23	7.13
MBL 011	21.82	Not treated	NEG	MUT	NEG	0	86.51	Alive	8.71	12.09
MBL 012	84.5	Not treated	ND	MUT	ND	0	84.54	Alive	4.71	8.14
MBL 013	42.71	Not treated	13q-	MUT	NEG	0	104.54	Alive	6.91	10.08
MBL 014	50.14	Not treated	13q-	MUT	NEG	0	64.36	Dead	7.43	7.43
MBL 015	55.33	Not treated	NEG	MUT	ND	0	95.34	Alive	5	9.3
MBL 016	98.14	Not treated	TRI12	MUT	NEG	0	98.14	Alive	4.74	5.45
MBL 017	92.19	Not treated	NEG	MUT	NEG	0	92.19	Alive	4.9	7.48
MBL 018	87.2	Not treated	NEG	MUT	NEG	II	87.2	Alive	6.69	26.53
MBL 019	59.47	Not treated	NEG	MUT	NEG	III	75.3	Dead	7.8	7.8
MBL 020	77.83	Not treated	13q-	UNMUT	NEG	I	79.28	Alive	6.43	38.82
MBL 021	72.51	Not treated	13q-	UNMUT	NEG	I	81.28	Alive	5.03	25.04
MBL 022	82.53	Not treated	13q-	UNMUT	NEG	II	82.53	Alive	4.96	7.49
MBL 023	62.88	Not treated	13q-	MUT	NEG	I	82.2	Alive	3.85	5.17
MBL 024	85.62	Not treated	13q-	MUT	NEG	0	85.62	Alive	6.27	6.29
MBL 025	45.21	Not treated	TRI12	ND	NEG	I	73.86	Alive	7.56	8.31
MBL 026	42.02	Not treated	TRI12	MUT	NEG	0	55.13	Alive	6.42	10.48

MBL 027	76.39	Not treated	NEG	MUT	NEG	0	76.39	Alive	8.82	8.82
MBL 028	71.79	Not treated	13q-	MUT	NEG	0	71.79	Alive	6.1	6.1
MBL 029	48.07	Not treated	TRI12	UNMUT	POS	I	74.15	Alive	5.22	9.7
MBL 030	60.19	Not treated	TRI12	UNMUT	NEG	0	67.42	Alive	5.99	9.96
MBL 031	57.79	Not treated	NEG	MUT	NEG	0	78.49	Alive	5.22	5.24
MBL 032	63.08	Not treated	11q-	UNMUT	NEG	II	71.92	Dead	4.74	8.27
MBL 033	34.63	Treated	TRI12	MUT	POS	IV	34.86	Dead	5.61	8.56
MBL 034	52.86	Treated	TRI12	MUT	NEG	II	71.95	Alive	7.01	12.56
MBL 035	0.43	Not treated	NEG	MUT	NEG	0	51.15	Alive	6.32	6.32
MBL 036	9.2	Not treated	NEG	MUT	NEG	0	50.53	Alive	6.55	7.49
MBL 037	23.03	Not treated	13q-	MUT	POS	0	72.74	Alive	7.26	8.95
MBL 038	2	Not treated	13q-	MUT	NEG	0	8.18	Alive	5.33	5.4
MBL 039	70.67	Not treated	13q-	MUT	POS	I	70.7	Alive	4.35	4.35
MBL 040	63.28	Not treated	13q-	MUT	NEG	0	63.41	Alive	5.29	5.29
MBL 041	1.61	Not treated	13q-	MUT	NEG	0	24.67	Alive	8.06	8.06
MBL 042	68.34	Not treated	13q-	MUT	NEG	0	68.34	Alive	6.71	9.22
MBL 043	20.86	Treated	NEG	UNMUT	POS	0	60.19	Dead	5	10.41
MBL 044	3.02	Not treated	13q-	MUT	NEG	0	83.78	Alive	5.26	11.22
MBL 045	3.71	Not treated	Other	UNMUT	NEG	0	37.49	Dead	6.59	11.66
MBL 046	63.11	Not treated	TRI12	MUT	NEG	I	63.31	Alive	7.2	8.3
MBL 047	15.38	Treated	NEG	MUT	NEG	I	62.92	Alive	1.4	3.46
MBL 048	37.29	Not treated	TRI12	UNMUT	POS	0	49.61	Alive	4.27	5.13
MBL 049	57.76	Not treated	TRI12	UNMUT	POS	0	58.22	Alive	6.82	6.82
MBL 050	59.14	Treated	13q-	MUT	NEG	0	61.41	Alive	5.11	14.64
MBL 051	15.84	Not treated	NEG	MUT	NEG	I	15.84	Alive	8.14	8.14
MBL 052	59.47	Not treated	NEG	MUT	NEG	0	59.47	Alive	4.5	9.01
MBL 053	62.42	Not treated	TRI12	MUT	NEG	I	62.88	Alive	4.86	5.4
MBL 054	0.46	Not treated	ND	UNMUT	ND	0	78.98	Alive	5.75	6.14
MBL 055	93.14	Not treated	11q-	UNMUT	POS	I	93.14	Alive	5.41	17.25
MBL 056	34.5	Not treated	NEG	MUT	NEG	0	94.75	Alive	4.49	8.04
MBL 057	66.1	Not treated	13q-	MUT	NEG	0	86.77	Dead	4.31	5.92

MBL 058	88.87	Not treated	13q-	MUT	NEG	0	88.87	Alive	5.24	7.45
MBL 059	77.27	Not treated	13q-	MUT	NEG	I	77.31	Alive	6.29	11.96
MBL 060	0.92	Not treated	NEG	UNMUT	NEG	I	70.37	Dead	3.39	5.22
MBL 061	2.69	Not treated	17p-	MUT	NEG	0	57.92	Alive	7.06	7.06
MBL 062	54.7	Not treated	13q-	MUT	POS	I	54.7	Alive	4.19	5.26
MBL 063	55.36	Not treated	TRI12	MUT	POS	II	55.36	Alive	3.45	8.58
MBL 064	0.62	Not treated	ND	MUT	NEG	0	16.95	Alive	8.88	8.88
MBL 065	25.59	Not treated	NEG	MUT	NEG	0	26.35	Alive	10.99	15.78
MBL 066	26.28	Not treated	13q-	MUT	NEG	I	33.12	Alive	5.7	14.16
MBL 067	31.67	Treated	13q-	MUT	NEG	I	34	Alive	12.64	66.42
MBL 068	7.92	Not treated	NEG	MUT	NEG	I	10.68	Alive	5.47	5.47
MBL 069	28.58	Not treated	NEG	UNMUT	NEG	0	28.58	Alive	6.35	13.72
MBL 070	24.35	Not treated	TRI12	MUT	NEG	0	24.35	Alive	5.53	17.09
MBL 071	29.27	Not treated	NEG	MUT	NEG	0	29.27	Alive	4.68	7.69
MBL 072	28.52	Not treated	NEG	UNMUT	POS	0	28.81	Alive	4.89	68.72
MBL 073	24.61	Not treated	13q-	MUT	NEG	0	27.04	Alive	5.54	10.79
MBL 074	22.08	Not treated	TRI12	UNMUT	POS	I	22.08	Alive	5.13	12.36
MBL 075	0.62	Not treated	ND	MUT	NEG	0	1.28	Alive	7.65	7.65
MBL 076	27.5	Not treated	13q-	MUT	NEG	IV	27.5	Alive	5.74	56.3
MBL 077	18.33	Not treated	TRI12	UNMUT	POS	0	18.76	Alive	6.97	38.87
MBL 078	2.53	Not treated	ND	MUT	NEG	I	6.64	Alive	5.36	5.36
MBL 079	42.94	Not treated	ND	UNMUT	NEG	0	43.5	Alive	5.83	11.55
MBL 080	18.92	Not treated	TRI12	UNMUT	POS	0	18.96	Alive	7.71	11.47
MBL 081	19.98	Not treated	NEG	MUT	NEG	0	19.98	Alive	6.24	18.18
MBL 082	17.64	Treated	TRI12	UNMUT	NEG	I	58.58	Alive	6.22	29.39
MBL 083	52.17	Not treated	13q-	MUT	NEG	I	52.21	Alive	2.51	131.32
MBL 084	3.02	Not treated	NEG	ND	POS	0	35.38	Alive	4.98	4.98
MBL 085	43.53	Not treated	13q-	MUT	NEG	III	43.53	Alive	5.24	7.1
MBL 086	29.73	Treated	TRI12	UNMUT	POS	II	49.18	Dead	6.06	29.78
MBL 087	10.45	Not treated	NEG	UNMUT	NEG	I	52.93	Alive	6.12	12.3
MBL 088	41.96	Not treated	13q-	MUT	POS	I	41.96	Alive	11.17	39.42

ID	TTFT (months)	Treated/ Untreated	FISH	VH	ZAP70	RAI	OS (months)	Status	ALC	ALC
MBL 089	42.58	Not treated	13q-	MUT	NEG	I	42.58	Alive	12.4	23.72
MBL 090	2.89	Not treated	13q-	MUT	NEG	0	37.55	Alive	10.65	44.26
MBL 091	46	Not treated	13q-	MUT	NEG	0	46	Alive	5.52	12.87
MBL 092	39.26	Not treated	ND	ND	ND	II	39.26	Alive	6.44	13.1
MBL 093	3.12	Not treated	ND	MUT	NEG	0	23.1	Alive	3.56	3.56
MBL 094	27.4	Treated	NEG	UNMUT	NEG	IV	89.59	Alive	18.63	2.82
MBL 095	22.41	Treated	NEG	MUT	NEG	IV	43.99	Alive	6.38	74.65
MBL 096	15.18	Not treated	ND	ND	NEG	0	23.89	Alive	7.68	11.34
MBL 097	47.15	Not treated	TRI12	MUT	NEG	I	49.41	Alive	7.7	16.32
MBL 098	42.02	Not treated	13q-	MUT	NEG	0	42.02	Alive	6.7	27.24
MBL 099	1.15	Treated	TRI12	ND	NEG	I	45.34	Alive	4.9	0.62
MBL 100	11.73	Not treated	13q-	UNMUT	NEG	0	52.76	Alive	7.8	11.42
MBL 101	47.51	Not treated	11q-	UNMUT	POS	I	51.06	Alive	3.62	74.12
MBL 102	1.87	Not treated	11q-	UNMUT	NEG	I	4.17	Dead	ND	ND
MBL 103	43.7	Not treated	NEG	MUT	NEG	0	43.7	Alive	7.61	22.27
MBL 104	1.12	Not treated	ND	MUT	NEG	0	42.91	Dead	8.58	8.58
MBL 105	0.69	Not treated	13q-	MUT	NEG	0	11.99	Alive	7.72	6.17
MBL 106	4.7	Treated	TRI12	MUT	NEG	IV	54.41	Alive	8.79	10.4
MBL 107	4.11	Not treated	Other	UNMUT	POS	II	50.1	Alive	9.39	80.11
MBL 108	33.97	Not treated	NEG	MUT	NEG	0	34.46	Alive	5.66	8.44
MBL 109	0.46	Not treated	13q-	ND	NEG	0	22.83	Alive	6.94	ND
MBL 110	42.65	Not treated	NEG	MUT	NEG	0	42.65	Alive	6.73	7.01
MBL 111	0.1	Not treated	NEG	MUT	NEG	I	30.29	Alive	6.37	5.18
Patients with CLL										
ID	TTFT (months)	Treated/ Untreated	FISH	VH	ZAP70	RAI	OS (months)	Status	ALC	ALC
CLLRai0 001	0	Not treated	ND	MUT	ND	0	69.78	Dead	6.6	7.88
CLLRai0 002	69.19	Not treated	13q-	MUT	NEG	0	70.64	Dead	7.24	20
CLLRai0 003	68.96	Not treated	13q-	MUT	POS	0	76.26	Alive	7.29	8.5
CLLRai0 004	73.82	Not treated	NEG	MUT	NEG	0	73.86	Alive	9.4	11.33
CLLRai0 005	48.76	Not treated	NEG	MUT	POS	0	59.4	Alive	14.35	36.48

CLLRai0 006	2.56	Not treated	17p-	MUT	NEG	0	81.25	Alive	14.7	30.97
CLLRai0 007	12.62	Not treated	TRI12	UNMUT	NEG	0	84.14	Alive	9.98	15.17
CLLRai0 008	0.2	Not treated	13q-	MUT	NEG	0	57.23	Alive	6.55	6.55
CLLRai0 009	9.2	Not treated	13q-	MUT	NEG	0	84.21	Alive	17.71	26.62
CLLRai0 010	78.72	Not treated	13q-	MUT	NEG	0	89.23	Alive	10.4	12.32
CLLRai0 011	41.07	Treated	13q-	MUT	NEG	I	84.44	Alive	14.02	37.58
CLLRai0 012	50.92	Not treated	13q-	MUT	NEG	II	79.57	Alive	21.18	43.53
CLLRai0 013	10.97	Not treated	17p-	MUT	NEG	0	90.05	Alive	15.36	26.95
CLLRai0 014	63.21	Not treated	13q-	MUT	NEG	II	63.21	Alive	12.23	14.11
CLLRai0 015	32.95	Not treated	13q-	MUT	ND	0	70.67	Alive	12.63	15.97
CLLRai0 016	43.37	Not treated	13q-	MUT	NEG	II	46.65	Alive	18.78	54.59
CLLRai0 017	2.56	Not treated	17p-	UNMUT	POS	0	74.09	Alive	23.57	27.81
CLLRai0 018	16.1	Not treated	13q-	MUT	NEG	0	58.94	Alive	17.61	122.61
CLLRai0 019	64.1	Not treated	13q-	MUT	POS	II	67.68	Alive	7.74	12.21
CLLRai0 020	10.51	Treated	13q-	UNMUT	POS	0	76.12	Alive	60.1	103.77
CLLRai0 021	5.95	Not treated	TRI12	UNMUT	NEG	0	77.77	Alive	15.63	24.66
CLLRai0 022	64.59	Not treated	13q-	UNMUT	NEG	I	65.02	Alive	16.69	21.45
CLLRai0 023	49.91	Treated	TRI12	MUT	POS	0	112.56	Alive	48.92	106.12
CLLRai0 024	13.21	Treated	17p-	UNMUT	POS	0	40.35	Dead	22.31	256.5
CLLRai0 025	7.85	Not treated	11q-	UNMUT	NEG	I	73.56	Alive	15.62	16.2
CLLRai0 026	63.54	Not treated	TRI12	UNMUT	NEG	II	63.61	Dead	9.5	10.16
CLLRai0 027	14.03	Treated	13q-	MUT	POS	IV	99.35	Alive	9.09	18.4
CLLRai0 028	55.2	Not treated	ND	MUT	ND	0	66.33	Dead	9.54	11.52
CLLRai0 029	34.07	Not treated	NEG	MUT	NEG	0	107.53	Alive	27.31	64.76
CLLRai0 030	48.72	Not treated	TRI12	ND	NEG	0	85.52	Alive	36.55	54
CLLRai0 031	14.09	Treated	13q-	UNMUT	NEG	III	15.7	Dead	32.4	201.82
CLLRai0 032	54.57	Not treated	13q-	MUT	ND	0	80.23	Dead	7.02	8.29
CLLRai0 033	76.52	Not treated	NEG	MUT	NEG	0	126	Alive	24.7	26.01
CLLRai0 034	116.34	Not treated	NEG	MUT	NEG	0	116.34	Alive	13.2	13.2
CLLRai0 035	101.06	Treated	13q-	MUT	NEG	III	117.95	Alive	16.73	26.62
CLLRai0 036	107.17	Not treated	NEG	UNMUT	NEG	0	128.3	Dead	12.44	23.6

CLLRai0 037	0.23	Not treated	ND	MUT	ND	0	0.66	Alive	10.95	10.95
CLLRai0 038	0.16	Not treated	ND	ND	ND	0	34.99	Dead	10.58	ND
CLLRai0 039	110.13	Not treated	NEG	MUT	ND	0	110.13	Alive	10.49	13.2
CLLRai0 040	102.08	Not treated	13q-	MUT	NEG	I	102.08	Alive	9.51	19.04
CLLRai0 041	65.61	Treated	13q-	UNMUT	ND	0	85.72	Alive	7.08	7.08
CLLRai0 042	70.51	Not treated	13q-	MUT	NEG	0	70.51	Alive	10.5	36.58
CLLRai0 043	51.42	Not treated	13q-	MUT	NEG	0	59.5	Alive	25.81	92.74
CLLRai0 044	60.22	Not treated	13q-	MUT	NEG	0	60.22	Alive	21.28	31
CLLRai0 045	2.96	Not treated	13q-	UNMUT	POS	0	34.69	Alive	13.15	24.17
CLLRai0 046	2.53	Not treated	13q-	MUT	NEG	0	2.53	Alive	21.67	21.67
CLLRai0 047	62.56	Not treated	13q-	MUT	POS	II	62.56	Alive	21.39	56.82
CLLRai0 048	1.12	Not treated	13q-	MUT	NEG	0	1.12	Alive	10.44	10.44
CLLRai0 049	4.9	Not treated	13q-	MUT	POS	0	4.9	Alive	10.49	11.55
CLLRai1-4 001	38.54	Treated	TRI12	UNMUT	ND	IV	72.38	Dead	18.73	35.37
CLLRai1-4 002	24.28	Treated	TRI12	UNMUT	ND	III	44.65	Dead	7.45	101.52
CLLRai1-4 003	65.09	Treated	ND	ND	ND	II	73.96	Dead	12.3	12.3
CLLRai1-4 004	22.64	Treated	13q-	MUT	ND	IV	115.52	Alive	14.22	56.97
CLLRai1-4 005	78.33	Treated	TRI12	MUT	POS	I	104.35	Alive	23.98	36.03
CLLRai1-4 006	20.04	Treated	NEG	MUT	ND	II	110.13	Alive	10.56	55.2
CLLRai1-4 007	14.16	Treated	TRI12	ND	ND	II	87.69	Alive	22.75	39.97
CLLRai1-4 008	0	Treated	ND	UNMUT	ND	IV	13.11	Dead	186.53	186.53
CLLRai1-4 009	79.61	Not treated	ND	MUT	ND	II	106.45	Alive	17.32	17.32
CLLRai1-4 010	124.95	Not treated	13q-	MUT	NEG	I	124.95	Alive	30.71	41.35
CLLRai1-4 011	1.61	Treated	TRI12	UNMUT	ND	III	73.4	Dead	43.84	43.84
CLLRai1-4 012	0.95	Treated	ND	MUT	ND	II	65.25	Alive	92.56	92.56
CLLRai1-4 013	41.63	Not treated	TRI12	MUT	POS	II	50.53	Dead	7.65	12.32
CLLRai1-4 014	23.59	Not treated	NEG	UNMUT	POS	II	95.38	Alive	16.41	81.18
CLLRai1-4 015	79.67	Treated	13q-	MUT	POS	III	93.64	Alive	18.18	57.15
CLLRai1-4 016	2	Not treated	13q-	UNMUT	POS	I	66.4	Alive	6.82	6.82
CLLRai1-4 017	48.13	Treated	13q-	MUT	POS	I	98.5	Alive	12	34.67
CLLRai1-4 018	4.04	Treated	TRI12	UNMUT	ND	I	96.36	Alive	19.58	38.55

	TTFT	Treatment	FISH	VH		RAI	OS			ALC	MaxALC
CLLRai1-4 019	85.75	Not treated	13q-	MUT	POS	II	86.01	Alive	7.34	9.86
CLLRai1-4 020	13.44	Not treated	13q-	UNMUT	ND	I	13.63	Alive	7.1	10.38
CLLRai1-4 021	1.15	Treated	Other	UNMUT	NEG	II	106.42	Alive	119.23	119.23
CLLRai1-4 022	32.2	Treated	13q-	UNMUT	NEG	III	97.48	Dead	13.53	26.5
CLLRai1-4 023	2	Treated	13q-	UNMUT	POS	II	105.3	Alive	34.18	39.04
CLLRai1-4 024	2	Treated	TRI12	UNMUT	ND	II	83.29	Alive	19.76	25.96
CLLRai1-4 025	97.74	Not treated	17p-	MUT	NEG	I	97.74	Alive	6.08	22.23
CLLRai1-4 026	46.29	Not treated	13q-	MUT	NEG	I	59.86	Alive	20.3	48.22
CLLRai1-4 027	2.63	Treated	17p-	UNMUT	NEG	I	8.74	Dead	53.68	114.75
CLLRai1-4 028	0.53	Not treated	13q-	MUT	POS	I	93.9	Alive	5.33	18.6
CLLRai1-4 029	38.6	Treated	TRI12	UNMUT	POS	I	55.75	Alive	7.12	9.2
CLLRai1-4 030	90.32	Not treated	NEG	MUT	NEG	I	90.32	Alive	16.72	22.1
CLLRai1-4 031	4.11	Not treated	TRI12	UNMUT	POS	II	82.27	Alive	11.18	18.22
CLLRai1-4 032	67.58	Treated	NEG	UNMUT	NEG	I	88.71	Alive	35.17	57.89
CLLRai1-4 033	2.3	Not treated	TRI12	MUT	ND	I	71.39	Alive	6	6.11
CLLRai1-4 034	57.17	Not treated	TRI12	UNMUT	POS	I	66.14	Alive	6.01	6.01
CLLRai1-4 035	4.11	Treated	TRI12	MUT	NEG	I	85.72	Alive	6.78	7.25
CLLRai1-4 036	57.99	Treated	NEG	UNMUT	NEG	IV	94.096	Dead	12.95	149.09
CLLRai1-4 037	18.6	Treated	13q-	MUT	ND	I	89.29921	Dead	10.32	21.6
CLLRai1-4 038	2.56	Not treated	TRI12	UNMUT	POS	I	73.59464	Alive	12.58	133.67
CLLRai1-4 039	12.09	Not treated	13q-	MUT	NEG	I	66.62943	Alive	6.25	6.55
CLLRai1-4 040	12.78	Treated	11q-	UNMUT	NEG	IV	77.99717	Alive	136.22	253.72
CLLRai1-4 041	2.66	Not treated	NEG	UNMUT	POS	I	74.74455	Alive	37.35	203.94
CLLRai1-4 042	73.76	Not treated	13q-	MUT	NEG	IV	73.9889	Alive	9.86	122.11
CLLRai1-4 043	72.71	Not treated	NEG	MUT	POS	I	72.70756	Alive	5.67	14.61
CLLRai1-4 044	50.27	Not treated	13q-	MUT	POS	IV	65.08526	Alive	5.6	38.12

TTFT = time from diagnosis to first treatment; FISH = fluorescence in situ hybridization; VH = IgHV mutation status; RAI = highest RAI stage; OS = overall survival; ALC = absolute lymphocyte count; MaxALC = maximum ALC value after the diagnosis date; ND = not done.

Supplementary Table 2. Clinical characteristics of patients with chronic lymphocytic leukemia (CLL) from MD Anderson and University of Southern California San Diego (groups C, D, and E).

ID	Sex	Age	TTFT (months)	B2M	FISH	VH	ZAP70	RAI	Treatment	NCI response	OS (months)	Status
CLL001	F	56	17.84	3.1	ND	MUT	NEG	0	FCR	CR	36.23	DEAD
CLL002	F	57	75.24	2.7	ND	MUT	NEG	1	FCR	CR	188.37	ALIVE
CLL003	M	57	58.18	2.7	ND	MUT	NEG	1	FCMR	CR	119.43	ALIVE
CLL004	F	66	21.19	5.6	ND	MUT	POS	3	FCR	CR	85.17	DEAD
CLL005	M	56	53.55	3.2	ND	MUT	NEG	2	FCR	CR	170.93	ALIVE
CLL006	M	53	28.71	4.6	ND	UNMUT	ND	2	FCR	CR	141.53	ALIVE
CLL007	M	49	0.76	4.4	ND	UNMUT	POS	4	FCR	CR	53.87	DEAD
CLL008	F	52	77.60	2.4	ND	MUT	NEG	1	FCR	CR	191	ALIVE
CLL009	M	57	1.61	4.4	ND	MUT	POS	1	FCR	CR	111.23	ALIVE
CLL010	F	39	41.63	8.3	ND	UNMUT	NEG	4	FCR	CR	120.8	ALIVE
CLL011	F	62	42.18	5.9	ND	UNMUT	NEG	1	FCR	NR	83.23	DEAD
CLL012	F	51	40.57	3.2	ND	UNMUT	POS	1	FCR	CR	156.9	ALIVE
CLL013	M	56	66.69	9.3	ND	UNMUT	POS	2	FCR	CR	178.47	ALIVE
CLL014	F	50	43.30	4.8	ND	ND	ND	2	FCR	NPR	151.83	ALIVE
CLL015	M	55	8.31	2.4	ND	UNMUT	POS	1	FCR	CR	123.2	ALIVE
CLL016	M	66	37.36	1.8	ND	UNMUT	POS	1	FCR	CR	108.6	DEAD
CLL017	M	61	1.35	3.3	ND	MUT	NEG	4	FCR	CR	76.57	ALIVE
CLL018	M	55	2.40	3.1	ND	UNMUT	NEG	3	FCR	NPR	116.7	ALIVE
CLL019	M	58	1.81	3.7	ND	UNMUT	POS	4	FCR	CR	84.63	DEAD
CLL020	M	68	47.21	5.4	ND	UNMUT	ND	3	FCR	PR	93.07	DEAD
CLL021	M	61	67.78	2.1	ND	MUT	NEG	2	FCR	NPR	120.97	DEAD
CLL022	M	37	1.68	2.2	ND	UNMUT	POS	2	FCR	CR	115.8	ALIVE
CLL023	F	52	27.93	2.9	ND	ND	ND	1	FCR	CR	115.5	DEAD
CLL024	M	61	1.18	7.4	ND	UNMUT	POS	4	FCR	CR	104.87	ALIVE
CLL025	M	63	19.61	3.1	ND	MUT	NEG	2	FCR	CR	124.77	ALIVE
CLL026	M	55	54.87	2.8	ND	UNMUT	POS	2	FCR	CR	167.57	ALIVE
CLL027	F	53	33.54	3.9	ND	UNMUT	POS	4	FCR	CR	140.33	ALIVE
CLL028	M	59	50.63	3.1	ND	UNMUT	NEG	3	FCR	NPR	147.7	ALIVE
CLL029	M	64	19.15	3.9	ND	ND	NEG	2	FCR	CR	119.8	ALIVE
CLL030	F	60	14.13	5.8	ND	UNMUT	ND	1	FCR	CR	119.47	ALIVE
CLL031	M	68	0.59	2.7	ND	MUT	NEG	1	FCR	CR	106.87	ALIVE
CLL032	F	40	52.80	2.5	ND	MUT	NEG	2	FCR	CR	155.27	ALIVE

CLL033	M	44	65.12	3.6	ND	MUT	NEG	2	FCR	CR	166.77	ALIVE
CLL034	F	70	94.42	3.1	ND	MUT	NEG	4	FCR	PR	187.2	ALIVE
CLL035	F	56	86.74	3.2	ND	UNMUT	POS	1	FCR	CR	189.43	ALIVE
CLL036	M	62	119.92	3.1	ND	MUT	NEG	2	FCR	CR	217.63	ALIVE
CLL037	M	71	19.12	7.1	ND	UNMUT	NEG	2	FCR	CR	97.73	DEAD
CLL038	M	51	4.47	3.5	ND	UNMUT	NEG	1	FCR	CR	55.4	DEAD
CLL039	M	74	33.31	4.7	ND	UNMUT	NEG	1	FCR	CR	125.07	ALIVE
CLL040	F	69	20.07	4.6	ND	UNMUT	POS	3	FCR	CR	114.63	ALIVE
CLL041	M	55	63.24	1.7	ND	UNMUT	POS	1	FCR	CR	160.33	ALIVE
CLL042	F	58	24.02	4.3	ND	UNMUT	NEG	2	FCR	CR	117.3	ALIVE
CLL043	M	55	34.69	3.7	ND	UNMUT	POS	2	FCR	CR	96.9	DEAD
CLL044	M	46	5.52	1.6	ND	UNMUT	POS	1	FCR	CR	83.53	ALIVE
CLL045	M	46	10.64	2.9	ND	UNMUT	POS	2	FCR	CR	100.87	ALIVE
CLL046	M	52	3.71	2	ND	UNMUT	POS	1	FCR	CR	95.97	ALIVE
CLL047	M	58	28.22	3.3	ND	MUT	NEG	1	FCR	CR	117.97	ALIVE
CLL048	M	52	28.29	2.9	ND	UNMUT	NEG	4	FCR	CR	109.8	ALIVE
CLL049	M	27	1.64	3	ND	UNMUT	POS	1	FCR	CR	72.2	DEAD
CLL050	M	40	0.95	4.8	ND	UNMUT	POS	4	FCR	NR	90.43	ALIVE
CLL051	M	74	57.92	7	ND	UNMUT	NEG	2	FCR	NPR	142.67	ALIVE
CLL052	M	60	1.41	2.7	ND	UNMUT	POS	2	FCR	CR	77.77	DEAD
CLL053	M	50	24.38	4.9	ND	MUT	NEG	4	FCR	CR	113.03	ALIVE
CLL054	M	57	115.94	4.5	ND	MUT	NEG	3	FCR	CR	199.57	ALIVE
CLL055	F	55	10.87	3.2	ND	UNMUT	POS	3	FCR	NPR	94.27	ALIVE
CLL056	M	63	1.74	3.3	ND	UNMUT	NEG	2	FCR	CR	88	ALIVE
CLL057	M	38	95.97	2.3	ND	UNMUT	NEG	2	FCR	CR	182.9	ALIVE
CLL058	M	46	4.57	2.2	ND	MUT	NEG	2	FCR	NPR	75.57	ALIVE
CLL059	M	56	15.93	2.2	ND	MUT	NEG	4	FCR	CR	97.63	ALIVE
CLL060	F	44	20.50	2.7	ND	UNMUT	NEG	1	FCR	CR	85.83	ALIVE
CLL061	M	70	1.12	5.9	ND	UNMUT	POS	1	FCR	CR	62.6	DEAD
CLL062	F	65	21.68	3.3	ND	UNMUT	POS	2	FCR	NR	41.97	DEAD
CLL063	M	58	42.38	4.1	ND	MUT	NEG	4	FCR	CR	115.63	ALIVE
CLL064	M	71	102.97	3	ND	UNMUT	POS	1	FCR	CR	181.43	ALIVE
CLL065	M	75	64.62	7.4	ND	MUT	POS	2	FCR	CR	131.23	ALIVE
CLL066	M	45	19.22	2.3	ND	MUT	NEG	1	FCR	CR	97.63	ALIVE
CLL067	M	60	0.72	3.4	13q-	UNMUT	NEG	2	FCR3	CR	74.67	ALIVE
CLL068	M	44	119.82	5.1	11q-	UNMUT	POS	3	FCR3	CR	193.8	ALIVE

CLL069	F	73	51.94	2.2	17q-	UNMUT	NEG	3	FCR	CR	107.03	DEAD
CLL070	F	58	0.79	1.5	ND	MUT	NEG	1	FCR	PR	138.77	ALIVE
CLL071	F	55	23.98	2.8	13q-	UNMUT	POS	1	FCR OS	CR	51.37	ALIVE
CLL072	F	65	99.45	4.7	NEG	MUT	NEG	4	FRONTLINE CFAR	PR	150.27	ALIVE
CLL073	M	68	7.75	8.1	TRI12	MUT	NEG	4	FRONTLINE CFAR	CR	59.9	ALIVE
CLL074	M	55	2.23	2.3	13q-	UNMUT	POS	2	FCR	CR	52.07	ALIVE
CLL075	M	66	4.11	5.1	TRI12	UNMUT	NEG	2	FRONTLINE CFAR	CR	56.73	ALIVE
CLL076	M	53	10.18	2.9	TRI12	UNMUT	NEG	0	FRONTLINE CFAR	CR	23.2	DEAD
CLL077	M	64	14.06	2.5	17p-	UNMUT	POS	2	FCR OS	PR	34.67	DEAD
CLL078	F	55	1.28	2.9	NEG	UNMUT	NEG	1	FCR	NPR	54.13	ALIVE
CLL079	M	47	0.69	1.9	NEG	UNMUT	POS	2	FCMR	CR	49.77	ALIVE
CLL080	M	48	72.18	5.3	11q-	UNMUT	POS	1	FRONTLINE CFAR	CR	121.47	ALIVE
CLL081	M	67	27.14	7	11q-	UNMUT	NEG	3	FRONTLINE CFAR	CR	66.5	DEAD
CLL082	M	60	0.07	3.1	NEG	MUT	POS	2	FCR OS	CR	32.93	ALIVE
CLL083	M	59	22.93	1.8	NEG	ND	POS	0	FCR+GM	CR	54.33	ALIVE
CLL084	F	59	40.18	5.3	17p-	UNMUT	POS	3	FRONTLINE CFAR	CR	90.5	ALIVE
CLL085	M	60	12.85	1.3	TRI12	ND	NEG	1	FCR+GM	CR	44.4	ALIVE
CLL086	F	49	8.80	3	13q-	UNMUT	POS	1	FCR OS	PR	59.1	ALIVE
CLL087	M	54	8.44	2.3	NEG	UNMUT	NEG	2	FCR OS	NPR	55.17	ALIVE
CLL088	M	51	2.00	2.5	NEG	MUT	NEG	4	FCR OS	CR	51.2	ALIVE
CLL089	M	60	9.46	2.1	11q-	UNMUT	POS	2	FCR+GM	CR	52.63	ALIVE
CLL090	M	44	2.30	2.6	11q-	UNMUT	POS	2	FCR OS	CR	46.53	ALIVE
CLL091	M	60	28.62	4	11q-	UNMUT	POS	1	FCR OS	CR	74.27	ALIVE
CLL092	M	65	22.60	5.3	11q-	UNMUT	POS	2	FRONTLINE CFAR	CR	68.03	ALIVE
CLL093	M	54	8.90	2.2	11q-	UNMUT	POS	1	FCR+GM	CR	56.6	ALIVE
CLL094	F	39	1.58	2.6	NEG	UNMUT	POS	1	FCR+GM	CR	41.47	ALIVE
CLL095	M	55	15.21	3.7	13q-	UNMUT	POS	2	FCR+GM	CR	56.9	ALIVE
CLL096	M	36	3.29	1.7	11q-	UNMUT	POS	1	FCR+GM	CR	47.07	ALIVE
CLL097	M	52	2.17	3.2	11q-	UNMUT	POS	2	FCR+GM	CR	46.27	ALIVE
CLL098	M	66	51.32	3.6	11q-	UNMUT	NEG	2	FCR+GM	CR	90.4	ALIVE
CLL099	M	66	13.24	7.1	TRI12	UNMUT	POS	3	CFAR	NPR	55	ALIVE
CLL100	M	65	72.77	2	NEG	UNMUT	NEG	4	FCR+GM	CR	108.03	DEAD
CLL101	M	57	0.62	3.5	11q-	UNMUT	POS	1	FCR+GM	CR	40.47	ALIVE
CLL102	M	43	0.99	2.3	11q-	UNMUT	POS	1	FCR+GM	PR	36.2	ALIVE
CLL103	F	77	18.73	3.5	11q-	UNMUT	NEG	1	FCR+GM	CR	48.33	ALIVE
CLL104	M	58	29.47	4.1	11q-	UNMUT	POS	1	CFAR	PR	70.17	ALIVE

CLL105	M	50	2.43	4	13q-	UNMUT	POS	2	CFAR	CR	36.3	ALIVE
CLL106	M	45	1.31	2	NEG	MUT	NEG	2	FCR+GM	CR	38.37	ALIVE
CLL107	M	55	23.49	2.9	NEG	MUT	NEG	2	FCR+GM	CR	62.37	DEAD
CLL108	M	61	3.38	2.7	TRI12	MUT	NEG	1	FCR+GM	CR	31.87	ALIVE
CLL109	M	48	32.56	7	NEG	MUT	POS	1	CFAR	NPR	61.83	ALIVE
CLL110	M	54	1.54	6	13q-	MUT	NEG	4	CFAR	CR	37.03	ALIVE
CLL111	F	43	39.82	3.5	NEG	MUT	NEG	1	FCR+GM	CR	62.53	ALIVE
CLL112	M	51	1.84	7.8	17p-	UNMUT	NEG	3	CFAR	CR	36.13	ALIVE
CLL113	M	69	41.23	4.4	13q-	MUT	NEG	3	FCR OS	CR	72.77	ALIVE
CLL114	M	51	0.79	3.6	NEG	UNMUT	POS	1	FCR OS	CR	30.9	ALIVE
CLL115	M	63	2.69	7.3	17p-	NR	POS	2	CFAR	CR	36.53	ALIVE
CLL116	M	61	56.61	5.7	11q-	UNMUT	NEG	2	CFAR	CR	84.97	ALIVE
CLL117	F	66	55.95	3.5	11q-	UNMUT	POS	1	FCR+GM	CR	82.93	ALIVE
CLL118	M	51	1.28	10.3	NEG	ND	NEG	4	FCR OS	PR	28.77	ALIVE
CLL119	F	56	16.53	3.2	NEG	UNMUT	POS	3	FCR+GM	CR	38.17	ALIVE
CLL120	M	49	31.87	2.9	TRI12	UNMUT	NEG	2	FCR+GM	CR	60.27	ALIVE
CLL121	M	59	190.49	7.9	NEG	UNMUT	POS	2	CFAR	PR	223.06	ALIVE
CLL122	M	61	17.45	3.9	11q-	NR	POS	1	FCR OS	CR	43.43	ALIVE
CLL123	M	46	2.30	4.7	TRI12	UNMUT	POS	2	CFAR	CR	31.93	ALIVE
CLL124	M	59	48.95	2.7	ND	UNMUT	POS	3	FCR	CR	61.67	ALIVE
CLL125	F	60	3.75	2.5	ND	UNMUT	NEG	1	FCR	CR	23.67	ALIVE
CLL126	M	63	68.44	3.5	13q-	UNMUT	POS	2	FCR	PR	84.27	ALIVE
CLL127	F	65	169.40	3.6	13q-	UNMUT	POS	2	FCR	PR	184.43	ALIVE
CLL128	M	50	2.33	3.7	11q-	UNMUT	POS	1	FCR	CR	15.6	ALIVE
CLL129	M	66	46.65	5.8	11q-	UNMUT	NEG	1	FCR	CR	60.27	ALIVE
CLL130	F	57	94.55	4.2	13q-	UNMUT	POS	2	FCR	NPR	111.87	ALIVE
CLL131	M	74	34.69	3.3	11q-	UNMUT	POS	4	FCR	PR	47.47	ALIVE
CLL132	M	68	33.05	4.1	11q-	UNMUT	POS	1	FCR	CR	45.03	ALIVE
CLL133	M	49	1.54	2.2	13q-	MUT	POS	1	FCR	CR	14.97	ALIVE
CLL134	F	73	39.33	3.1	TRI12	UNMUT	POS	2	FCR	CR	50.5	ALIVE
CLL135	M	39	65.35	5.3	ND	UNMUT	POS	4	FCR	NR	85.93	DEAD
CLL136	F	66	11.53	7.4	17p-	UNMUT	NEG	2	FCR OS	PR	41.27	DEAD
CLL137	M	60	3.12	4.8	13q-	UNMUT	POS	2	CFAR	CR	46.2	ALIVE
CLL138	M	46	6.24	1.9	NEG	UNMUT	POS	0	FCR	CR	33.27	ALIVE
CLL139	M	46	56.15	5.7	13q-	UNMUT	POS	4	FCR OS	CR	70.9	ALIVE
CLL140	M	63	2.10	4	11q-	UNMUT	NEG	1	FCR	CR	20.57	ALIVE

CLL141	M	52	0.66	4.1	11q-	UNMUT	POS	2	FCR	CR	14.93	ALIVE
CLL142	M	54	2.23	4.4	17p-	UNMUT	POS	2	FCR	NR	17.37	ALIVE
CLL143	M	62	8.15	2.4	NEG	UNMUT	NEG	1	FCR	CR	19.17	ALIVE
CLL144	M	49.6	1.02	2.3	13q-	MUT	NEG	2	FR (5 cycles)	CR	68.5339	ALIVE
CLL145	M	61.3	57.03	3.1	ND	UNMUT	POS	4	FCR (CR initially, then MRD)	CR	86.4394	DEAD
CLL146	M	40	26.55	ND	NEG	MUT	NEG	2	FCR (6 cycles) - no MRD in BM	CR	109.405	ALIVE
CLL147	M	58	33.97	ND	NEG	UNMUT	POS	4	FR (6 cycles)	CR	99.5811	ALIVE
CLL148	F	45	18.43	2.2	TRI12	UNMUT	POS	2	FCR (6 cycles)	CR	98.7598	ALIVE
CLL149	M	45.7	43.96	1.3	NEG	UNMUT	NEG	4	FCR (6 cycles)	CR	93.1417	ALIVE
CLL150	M	47	22.01	1.5	13q-	MUT	NEG	2	FR (6 cycles)	CR	79.8029	ALIVE
CLL151	M	56.1	16.07	2.3	TRI12	UNMUT	POS	2	FCR (6 cycles) - <0.1% MRD	CR	79.8686	ALIVE
CLL152	F	61.3	50.46	3.8	13q-	MUT	NEG	2	FR (6 cycles)	CR	64.8542	ALIVE
CLL153	M	52	0.00	2	13q-	MUT	NEG	4	FR (5 cycles) - NO MRD (4/07)	CR	62.5544	ALIVE
CLL154	F	73	21.42	ND	ND	UNMUT	NEG	2	FR	CR	16.7885	ALIVE
CLL155	M	52.6	252.48	2.3	NEG	MUT	NEG	2	FCR	CR	65.117	ALIVE
CLL156	M	70.1	42.74	ND	ND	MUT	NEG	4	FCR (6 cycles)	NR	111.409	DEAD
CLL157	M	48.2	29.01	4	NEG	UNMUT	POS	2	FR (F refractory after 2 cycles)	NR	75.2361	DEAD
CLL158	M	73.6	94.98	4.3	13q-	MUT	NEG	4	FC	NR	22.9651	DEAD
CLL159	M	67.2	4.96	2.8	NEG	ND	POS	2	FR (6 cycles)	NR	32.23	DEAD
CLL160	F	72.4	3.55	ND	17p-	UNMUT	NEG	3	Fludarabine + Cytoxan	NR	2.98973	ALIVE
CLL161	M	48.3	7.26	ND	NEG	UNMUT	POS	1	FCR (6 cycles)	PR	65.577	ALIVE
CLL162	M	59.9	9.40	ND	TRI12	UNMUT	POS	2	Fludarabine	PR	61.6016	DEAD
CLL163	M	57.8	24.84	ND	ND	ND	ND	3	Fludarabine + cyclophosphamide	PR	28.5175	DEAD
CLL164	F	52.9	71.66	ND	ND	ND	ND	2	FR (2 cycles) - good response	PR	83.4497	ALIVE
CLL165	F	61.8	30.00	2.2	NEG	UNMUT	POS	3	HDMP + R frontline	PR	95.2115	ALIVE
CLL166	M	64.9	23.26	2.3	11q-	MUT	NEG	3	FR (6 cycles)	PR	81.807	DEAD
CLL167	F	49.8	50.07	2.6	ND	UNMUT	POS	2	FR (6 cycles) - MRD BM 4/04	PR	86.2423	ALIVE
CLL168	F	77.5	20.93	2.9	TRI12	UNMUT	POS	2	Ritux + low-dose glucorticoids	PR	38.3409	DEAD
CLL169	M	68.2	25.92	1.5	11q-	UNMUT	POS	4	FR	PR	69.2895	DEAD
CLL170	F	58.8	19.25	3	TRI12	UNMUT	NEG	4	FCR (6 cycles) - MRD (8/05)	PR	69.5524	DEAD
CLL171	M	72.2	68.01	2.9	13q-	MUT	NEG	2	FR	PR	66.0041	ALIVE
CLL172	M	56.9	139.04	1.9	13q-	MUT	NEG	2	Fludarabine + Ritux	PR	54.7351	ALIVE
CLL173	F	70	16.53	2.7	TRI12	MUT	NEG	3	FR	PR	26.6776	ALIVE
CLL174	F	42.4	0.00	ND	13q-	UNMUT	POS	4	FCR	PR	5.28953	ALIVE
CLL175	M	67	49.81	1.6	NEG	NR	ND	1	Lenalidomide A	CR	78.17	DEAD
CLL176	M	70	142.46	4.7	ND	UNMUT	ND	4	Lenalidomide A	CR	192.67	ALIVE

CLL177	M	33	80.07	3.6	11q-	UNMUT	POS	1	Lenalidomide A	MR	98.8	DEAD
CLL178	M	49	119.95	2.3	11q-	UNMUT	ND	3	Lenalidomide A	MR	145.83	DEAD
CLL179	F	62	196.83	8.2	11q-	UNMUT	POS	4	Lenalidomide A	MR	201.03	DEAD
CLL180	F	70	127.80	3.4	17p-	MUT	NEG	4	Lenalidomide A	MR	177.87	ALIVE
CLL181	M	63	102.14	5.2	11q-	UNMUT	POS	4	Lenalidomide A	MR	120.03	DEAD
CLL182	M	57	63.15	2.9	TRI12	UNMUT	POS	1	Lenalidomide A	MR	108.1	ALIVE
CLL183	F	82	215.79	10.1	11q-	UNMUT	ND	3	Lenalidomide A	NR	284.43	DEAD
CLL184	M	57	159.41	5.5	13q-	UNMUT	ND	4	Lenalidomide A	NR	165.93	DEAD
CLL185	M	77	117.59	7.6	17p-	UNMUT	POS	2	Lenalidomide A	NR	143.53	DEAD
CLL186	M	64	172.98	3.9	11q-	UNMUT	POS	2	Lenalidomide A	NR	228.37	ALIVE
CLL187	M	56	35.48	2.2	TRI12	UNMUT	ND	4	Lenalidomide A	NR	89.97	ALIVE
CLL188	F	59	53.03	5	NEG	UNMUT	POS	2	Lenalidomide A	NR	67.7	DEAD
CLL189	M	65	22.05	4.1	11q-	UNMUT	POS	3	Lenalidomide A	NR	66.57	DEAD
CLL190	F	69	62.00	4.6	TRI12	UNMUT	ND	3	Lenalidomide A	NR	112.27	ALIVE
CLL191	M	53	58.78	2.2	11q-	UNMUT	POS	1	Lenalidomide A	NR	104.13	ALIVE
CLL192	M	59	144.26	8.5	11q-	NR	POS	1	Lenalidomide A	NR	166.7	DEAD
CLL193	F	69	77.47	5.6	17p-	UNMUT	POS	4	Lenalidomide A	NR	79.93	DEAD
CLL194	M	67	60.19	6.3	TRI12	UNMUT	POS	2	Lenalidomide A	NR	66.37	DEAD
CLL195	M	69	108.42	9.4	ND	UNMUT	POS	4	Lenalidomide A	PR	116.27	DEAD
CLL196	M	62	91.01	3.6	ND	UNMUT	ND	1	Lenalidomide A	PR	113.23	DEAD
CLL197	M	72	91.99	3.4	TRI12	MUT	ND	2	Lenalidomide A	PR	105.93	DEAD
CLL198	M	70	96.43	6.4	11q-	UNMUT	ND	2	Lenalidomide A	PR	114.17	DEAD
CLL199	M	59	83.48	4.7	11q-	UNMUT	POS	1	Lenalidomide A	PR	136.63	ALIVE
CLL200	M	56	139.07	4.9	11q-	UNMUT	POS	1	Lenalidomide A	CR	159.23	DEAD
CLL201	M	70	100.30	7.1	NEG	MUT	POS	3	Lenalidomide A	PR	110.67	DEAD
CLL202	M	82	77.01	4.3	TRI12	UNMUT	NEG	2	Lenalidomide A	PR	35.1934	ALIVE
CLL203	M	73	58.25	3	13q-	UNMUT	NEG	1	Lenalidomide B	PR	26.7984	ALIVE
CLL204	F	67	53.72	2.9	13q-	UNMUT	POS	3	Lenalidomide B	PR	33.4156	ALIVE
CLL205	F	67	164.07	3.2	13q-	UNMUT	NEG	2	Lenalidomide B	PR	32.0329	ALIVE
CLL206	M	85	65.15	6.1	NEG	UNMUT	POS	1	Lenalidomide B	PR	34.2058	ALIVE
CLL207	F	66	29.86	4.5	TRI12	UNMUT	NEG	1	Lenalidomide B	PR	29.7942	ALIVE
CLL208	M	73	4.53	6.3	13q-	UNMUT	POS	2	Lenalidomide B	CR	35.8848	ALIVE
CLL209	M	72	13.57	4.3	TRI12	UNMUT	NEG	1	Lenalidomide B	CR	24.8889	ALIVE
CLL210	M	67	29.93	3.6	11q-	UNMUT	NEG	1	Lenalidomide B	CR	30.4527	ALIVE
CLL211	F	76	17.91	4.2	NEG	MUT	POS	4	Lenalidomide B	NPR	31.7695	ALIVE
CLL212	F	82	75.70	2.1	13q-	MUT	NEG	4	Lenalidomide B	PR	35.2593	ALIVE

CLL213	F	68	82.86	3.1	11q-	UNMUT	POS	1	Lenalidomide B	CR	30.321	ALIVE
CLL214	M	71	105.33	3.1	13q-	MUT	ND	4	Lenalidomide B	MR	19.9506	ALIVE
CLL215	F	69	45.08	3.9	TRI12	MUT	NEG	2	Lenalidomide B	NPR	30.716	ALIVE
CLL216	F	68	123.50	3.9	TRI12	MUT	NEG	1	Lenalidomide B	PR	24.8889	ALIVE
CLL217	M	74	93.77	6	13q-	UNMUT	ND	1	Lenalidomide B	NPR	28.4444	ALIVE
CLL218	M	70	38.64	2.5	11q-	UNMUT	POS	1	Lenalidomide B	PR	32.3292	ALIVE
CLL219	M	66	70.90	4.2	NEG	UNMUT	POS	2	Lenalidomide B	PR	24.6914	ALIVE
CLL220	F	67	52.44	7.2	11q-	UNMUT	NEG	3	Lenalidomide B	MR	26.3045	ALIVE
CLL221	M	72	202.45	10.2	11q-	NR	NEG	1	Lenalidomide B	NR	19.9177	DEAD
CLL222	F	68	7.79	3.2	TRI12	MUT	NEG	1	Lenalidomide B	PR	23.2757	ALIVE
CLL223	M	68	21.85	2.8	NEG	UNMUT	POS	1	Lenalidomide B	NPR	28.642	ALIVE
CLL224	M	66	117.29	4.9	TRI12	UNMUT	NEG	2	Lenalidomide B	MR	27.6872	ALIVE
CLL225	F	72	130.69	3.8	13q-	MUT	NEG	2	Lenalidomide B	MR	33.9424	ALIVE
CLL226	F	77	11.96	6.9	17p-	NR	POS	2	Lenalidomide B	NR	24.0658	DEAD
CLL227	M	72	62.75	4.5	13q-	UNMUT	POS	0	Lenalidomide B	NPR	33.4486	ALIVE
CLL228	M	79	71.26	5.4	11q-	UNMUT	ND	1	Lenalidomide B	NPR	27.1276	ALIVE

TTFT = time from diagnosis to first treatment; FISH = fluorescence in situ hybridization; VH = IgHV mutation status; RAI = highest Rai stage; OS = overall survival; ND = not done; FCR = fludarabine, cyclophosphamide, and rituximab; Lenalidomide A = lenalidomide single agent as salvage therapy; Lenalidomide B = lenalidomide single agent as initial therapy.

Supplementary Table 3. miRNA expression in patient samples from groups A and B (raw data).

	Samples from individuals with monoclonal B-cell lymphocytosis (MBL)											
	miR-155			miR-15a			miR-16			miR-21		
ID	5S rRNA	ΔCt	Relative expression	5S rRNA	ΔCt	Relative expression	5S rRNA	ΔCt	Relative expression	5S rRNA	ΔCt	Relative expression
MBL 001	18.1	6.36	0.012	18.1	11.73	0	18.1	3.07	0.119	18.1	4.89	0.034
MBL 002	21.1	4.1	0.058	21.1	8.28	0.003	21.1	0	1	21.1	2.08	0.237
MBL 003	20.26	4.91	0.033	20.26	10.02	0.001	20.26	1.43	0.372	20.26	4.18	0.055
MBL 004	20.43	4.54	0.043	20.43	10.02	0.001	20.43	1.75	0.297	20.43	3.13	0.115
MBL 005	20.09	3.16	0.112	20.09	7.75	0.005	20.09	0.88	0.544	20.09	2.19	0.219
MBL 006	20.06	4.86	0.035	20.06	8.8	0.002	20.06	1.31	0.402	20.06	3.36	0.097
MBL 007	19.49	6.06	0.015	19.49	9.4	0.001	19.49	2.3	0.202	19.49	4.31	0.051
MBL 008	20.6	2.28	0.206	20.6	9.51	0.001	20.6	2.06	0.239	20.6	2.31	0.202
MBL 009	21.21	2.18	0.22	21.21	6.37	0.012	21.21	-0.44	1.357	21.21	1.51	0.351
MBL 010	19.15	4.35	0.049	19.15	9.36	0.002	19.15	1.91	0.267	19.15	4.09	0.059
MBL 011	19.72	3.98	0.064	19.72	7.58	0.005	19.72	0.59	0.663	19.72	2.65	0.159
MBL 012	19.39	4.29	0.051	19.39	8.92	0.002	19.39	2.06	0.239	19.39	3.15	0.112
MBL 013	19.67	4.71	0.038	19.67	10.23	0.001	19.67	2.86	0.137	19.67	4.49	0.044
MBL 014	19.5	4.5	0.044	19.5	8.94	0.002	19.5	2.35	0.197	19.5	2.94	0.131
MBL 015	21.03	3.07	0.119	21.03	7.75	0.005	21.03	0.37	0.771	21.03	2.94	0.13
MBL 016	20.83	3.19	0.109	20.83	7.39	0.006	20.83	0.24	0.847	20.83	1.84	0.28
MBL 017	20.06	3.7	0.077	20.06	8.78	0.002	20.06	1.74	0.299	20.06	2.94	0.131
MBL 018	20.16	4.05	0.06	20.16	8.15	0.004	20.16	1.19	0.438	20.16	2.95	0.129
MBL 019	19.88	4.21	0.054	19.88	9.4	0.001	19.88	2.11	0.232	19.88	3.65	0.08
MBL 020	18.92	3.23	0.106	18.92	10.57	0.001	18.92	3.2	0.109	18.92	3.75	0.074
MBL 021	18.31	2.89	0.135	18.31	8.31	0.003	18.31	1.7	0.307	18.31	2.73	0.151
MBL 022	18.14	4.01	0.062	18.14	9.09	0.002	18.14	2.06	0.239	18.14	3.84	0.07
MBL 023	18.9	5.59	0.021	18.9	9.77	0.001	18.9	2.31	0.201	18.9	4.9	0.034
MBL 024	18.24	5.56	0.021	18.24	9.01	0.002	18.24	2.12	0.231	18.24	3.3	0.102
MBL 025	18.7	5.74	0.019	18.7	9.99	0.001	18.7	2.95	0.129	18.7	4.65	0.04
MBL 026	18.32	5.67	0.02	18.32	9.91	0.001	18.32	3.13	0.114	18.32	4.21	0.054
MBL 027	18.01	7.22	0.007	18.01	9.76	0.001	18.01	2.36	0.195	18.01	5.14	0.028
MBL 028	18.06	6.02	0.015	18.06	9.31	0.002	18.06	2.47	0.181	18.06	3.87	0.068
MBL 029	21.8	7.59	0.005	21.8	12.37	0	21.8	5.7	0.019	21.8	7.41	0.006
MBL 030	18.69	5.73	0.019	18.69	10.11	0.001	18.69	2.73	0.15	18.69	4.59	0.041
MBL 031	19.47	4.53	0.043	19.47	8.76	0.002	19.47	1.78	0.291	19.47	3.52	0.087
MBL 032	18.6	4.2	0.054	18.6	8.73	0.002	18.6	0.82	0.565	18.6	3.82	0.071
MBL 033	18.64	6.67	0.01	18.64	9.12	0.002	18.64	2.43	0.186	18.64	4.74	0.037

MBL 034	20.61	8.21	0.003	20.61	13.76	0	20.61	6.54	0.011	20.61	8.97	0.002
MBL 035	18.27	5.62	0.02	18.27	9.28	0.002	18.27	2.56	0.17	18.27	4.71	0.038
MBL 036	18.69	6.53	0.011	18.69	9.59	0.001	18.69	2.62	0.163	18.69	4.15	0.056
MBL 037	19.07	5.12	0.029	19.07	10	0.001	19.07	3.15	0.113	19.07	3.75	0.075
MBL 038	21.39	4.46	0.045	21.39	11.07	0	21.39	3.75	0.074	21.39	5.5	0.022
MBL 039	19.02	4.74	0.037	19.02	8.8	0.002	19.02	2.02	0.246	19.02	3.25	0.105
MBL 040	18.59	4.15	0.056	18.59	8.9	0.002	18.59	2.13	0.229	18.59	3.42	0.093
MBL 041	18.06	6.2	0.014	18.06	9.94	0.001	18.06	2.89	0.135	18.06	4.65	0.04
MBL 042	18.89	4.69	0.039	18.89	8.8	0.002	18.89	2.31	0.202	18.89	3.75	0.074
MBL 043	19.2	4.04	0.061	19.2	8.9	0.002	19.2	1.75	0.297	19.2	3.51	0.088
MBL 044	19.09	4.3	0.051	19.09	9.95	0.001	19.09	3.07	0.119	19.09	3.48	0.089
MBL 045	18.79	2.78	0.146	18.79	8.05	0.004	18.79	1.09	0.468	18.79	3.02	0.123
MBL 046	18.49	6.16	0.014	18.49	8.69	0.002	18.49	2.11	0.231	18.49	3.98	0.063
MBL 047	20.06	6.29	0.013	20.06	9.74	0.001	20.06	2.73	0.151	20.06	5.06	0.03
MBL 048	18.9	7.21	0.007	18.9	9.72	0.001	18.9	2.52	0.174	18.9	4.59	0.042
MBL 049	20.02	6.55	0.011	20.02	9.26	0.002	20.02	2.02	0.247	20.02	4.87	0.034
MBL 050	19.04	4.81	0.036	19.04	8.8	0.002	19.04	2.42	0.186	19.04	2.65	0.159
MBL 051	19.48	4.37	0.048	19.48	8.56	0.003	19.48	1.06	0.479	19.48	3.5	0.088
MBL 052	19.22	5.47	0.023	19.22	8.8	0.002	19.22	1.77	0.293	19.22	4.18	0.055
MBL 053	19.16	5.2	0.027	19.16	9.56	0.001	19.16	2.61	0.164	19.16	3.45	0.091
MBL 054	19.13	4.06	0.06	19.13	8.98	0.002	19.13	1.88	0.271	19.13	4.42	0.047
MBL 055	19.07	4.36	0.049	19.07	9.25	0.002	19.07	1.82	0.284	19.07	3.76	0.074
MBL 056	18.16	5.02	0.031	18.16	8.99	0.002	18.16	2.1	0.233	18.16	3.73	0.076
MBL 057	19.71	3.09	0.117	19.71	8.35	0.003	19.71	0.87	0.547	19.71	2.83	0.14
MBL 058	19.11	5.45	0.023	19.11	9.15	0.002	19.11	2.18	0.221	19.11	4.04	0.061
MBL 059	19.24	3.99	0.063	19.24	9.37	0.002	19.24	2.23	0.212	19.24	4.18	0.055
MBL 060	20.05	5.6	0.021	20.05	7.86	0.004	20.05	0.52	0.695	20.05	3.23	0.106
MBL 061	19.36	5.3	0.025	19.36	8.7	0.002	19.36	1.76	0.295	19.36	3.6	0.083
MBL 062	20.38	4.21	0.054	20.38	10.8	0.001	20.38	3.21	0.108	20.38	5.4	0.024
MBL 063	19.17	6.52	0.011	19.17	10.34	0.001	19.17	3.24	0.106	19.17	5.17	0.028
MBL 064	19.5	4.89	0.034	19.5	10.83	0.001	19.5	2.07	0.237	19.5	6.41	0.012
MBL 065	18.91	4.32	0.05	18.91	8.86	0.002	18.91	1.33	0.397	18.91	3.73	0.075
MBL 066	17.78	5.79	0.018	17.78	11.96	0	17.78	3.67	0.079	17.78	6.04	0.015
MBL 067	18.33	4.59	0.042	18.33	12.3	0	18.33	3.42	0.094	18.33	5.45	0.023
MBL 068	18.34	5.14	0.028	18.34	9.83	0.001	18.34	2.34	0.198	18.34	4.72	0.038
MBL 069	19.4	7.13	0.007	19.4	13.91	0	19.4	5.53	0.022	19.4	10.12	0.001
MBL 070	23.76	4.16	0.056	23.76	NA	NA	23.76	3.4	0.094	23.76	6.99	0.008
MBL 071	20.45	3.76	0.074	20.45	8.16	0.003	20.45	0.11	0.925	20.45	3.13	0.114

MBL 072	18.2	3.19	0.109	18.2	8.87	0.002	18.2	0.98	0.506	18.2	4.57	0.042
MBL 073	18.21	3.93	0.066	18.21	10.32	0.001	18.21	2.1	0.233	18.21	4.74	0.037
MBL 074	18.29	6	0.016	18.29	11.3	0	18.29	3.35	0.098	18.29	5.23	0.027
MBL 075	18.48	5.76	0.018	18.48	13.82	0	18.48	4.86	0.034	18.48	6.41	0.012
MBL 076	18.7	8.68	0.002	18.7	NA	NA	18.7	8.03	0.004	18.7	11.59	0
MBL 077	18.7	5.64	0.02	18.7	12.23	0	18.7	3.67	0.079	18.7	7.42	0.006
MBL 078	19.94	6.04	0.015	19.94	12.38	0	19.94	3.64	0.08	19.94	7.8	0.004
MBL 079	17.7	6.53	0.011	17.7	12.28	0	17.7	3.91	0.067	17.7	7.17	0.007
MBL 080	17.25	6.1	0.015	17.25	11.99	0	17.25	4.08	0.059	17.25	5.97	0.016
MBL 081	19.07	4.63	0.04	19.07	10.52	0.001	19.07	2.22	0.215	19.07	5.75	0.019
MBL 082	21.15	5.43	0.023	21.15	11.89	0	21.15	2.44	0.184	21.15	8.01	0.004
MBL 083	22.31	7	0.008	22.31	NA	NA	22.31	6.68	0.01	22.31	9.94	0.001
MBL 084	24.01	6.84	0.009	24.01	NA	NA	24.01	6.26	0.013	24.01	9.83	0.001
MBL 085	19.08	5.48	0.022	19.08	NA	NA	19.08	5.85	0.017	19.08	7.32	0.006
MBL 086	18.36	4.69	0.039	18.36	10.13	0.001	18.36	2.36	0.195	18.36	4.77	0.037
MBL 087	18.87	3.33	0.099	18.87	9.1	0.002	18.87	1.34	0.396	18.87	3.56	0.085
MBL 088	18.09	5.19	0.027	18.09	10.64	0.001	18.09	2.42	0.187	18.09	4.96	0.032
MBL 089	18.18	5.59	0.021	18.18	10.53	0.001	18.18	2.04	0.243	18.18	5.56	0.021
MBL 090	23.1	5.23	0.027	23.1	NA	NA	23.1	4.37	0.048	23.1	8.74	0.002
MBL 091	19.08	3.85	0.07	19.08	10.3	0.001	19.08	1.71	0.305	19.08	4.48	0.045
MBL 092	18.36	4.87	0.034	18.36	10.27	0.001	18.36	2.12	0.23	18.36	5.36	0.024
MBL 093	18.36	7.07	0.007	18.36	12.27	0	18.36	3.16	0.112	18.36	7.75	0.005
MBL 094	21.7	7.92	0.004	21.7	NA	NA	21.7	7.42	0.006	21.7	10.96	0.001
MBL 095	18.58	3.69	0.077	18.58	9.44	0.001	18.58	1.56	0.338	18.58	5.02	0.031
MBL 096	18.15	4.91	0.033	18.15	9.93	0.001	18.15	2.19	0.219	18.15	4.39	0.048
MBL 097	18.25	6.6	0.01	18.25	10.23	0.001	18.25	2.15	0.226	18.25	5.98	0.016
MBL 098	18.2	4.48	0.045	18.2	9.91	0.001	18.2	2.18	0.221	18.2	4.31	0.05
MBL 099	18.6	5.65	0.02	18.6	10.77	0.001	18.6	2.47	0.181	18.6	6.12	0.014
MBL 100	18.14	5.2	0.027	18.14	14.72	0	18.14	4.9	0.033	18.14	5.02	0.031
MBL 101	19.06	3.64	0.08	19.06	10.72	0.001	19.06	2.3	0.203	19.06	5.58	0.021
MBL 102	18.12	3.57	0.084	18.12	10.46	0.001	18.12	1.99	0.251	18.12	4.86	0.034
MBL 103	19.77	5.44	0.023	19.77	11.29	0	19.77	2.82	0.142	19.77	6.79	0.009
MBL 104	19.54	6.28	0.013	19.54	12.7	0	19.54	4.33	0.05	19.54	7.56	0.005
MBL 105	18.71	5.38	0.024	18.71	11.03	0	18.71	2.97	0.128	18.71	6.02	0.015
MBL 106	18.02	7.37	0.006	18.02	9.92	0.001	18.02	2.42	0.187	18.02	5.7	0.019
MBL 107	17.65	4.47	0.045	17.65	10.43	0.001	17.65	2.28	0.206	17.65	6.34	0.012
MBL 108	18.52	5.55	0.021	18.52	10.72	0.001	18.52	2.57	0.169	18.52	6.04	0.015
MBL 109	18.16	5.25	0.026	18.16	11.63	0	18.16	3.79	0.073	18.16	5.94	0.016

ID	5S rRNA	ΔCt	Relative expression	5S rRNA	ΔCt	Relative expression	5S rRNA	ΔCt	Relative expression	5S rRNA	ΔCt	Relative expression
MBL 110	18.41	7.79	0.005	18.41	12.24	0	18.41	3.57	0.084	18.41	7.67	0.005
MBL 111	18.18	5.81	0.018	18.18	12.87	0	18.18	4.23	0.053	18.18	6.28	0.013

Samples from patients with chronic lymphocytic leukemia (CLL)

ID	miR-155			miR-15a			miR-16			miR-21		
	5S rRNA	ΔCt	Relative expression	5S rRNA	ΔCt	Relative expression	5S rRNA	ΔCt	Relative expression	5S rRNA	ΔCt	Relative expression
CLLRai0 001	19.66	3.62	0.082	19.66	8.23	0.003	19.66	0.8	0.573	19.66	3.09	0.118
CLLRai0 002	17.91	3.89	0.068	17.91	8.39	0.003	17.91	1.58	0.335	17.91	3.44	0.092
CLLRai0 003	19.24	4.21	0.054	19.24	8.66	0.002	19.24	1.95	0.259	19.24	2.9	0.134
CLLRai0 004	19.63	4.96	0.032	19.63	8.73	0.002	19.63	1.69	0.31	19.63	3.45	0.092
CLLRai0 005	18.99	3.41	0.094	18.99	9.08	0.002	18.99	2.31	0.202	18.99	3.25	0.105
CLLRai0 006	19.03	3.25	0.105	19.03	10.58	0.001	19.03	2.95	0.129	19.03	2.33	0.199
CLLRai0 007	19.21	5.24	0.026	19.21	8.7	0.002	19.21	1.65	0.319	19.21	3.75	0.075
CLLRai0 008	19.81	3.38	0.096	19.81	8.84	0.002	19.81	1.65	0.319	19.81	2.05	0.241
CLLRai0 009	18.49	4.08	0.059	18.49	9.03	0.002	18.49	1.76	0.296	18.49	4.05	0.06
CLLRai0 010	20.43	1.99	0.251	20.43	8.27	0.003	20.43	1.11	0.464	20.43	1.93	0.262
CLLRai0 011	20.81	1.28	0.411	20.81	5.87	0.017	20.81	-1.36	2.561	20.81	1.16	0.448
CLLRai0 012	20.04	1.27	0.413	20.04	6.27	0.013	20.04	-0.47	1.389	20.04	1.72	0.305
CLLRai0 013	20.34	2.29	0.204	20.34	8.24	0.003	20.34	1.11	0.464	20.34	2.05	0.242
CLLRai0 014	18.22	4.68	0.039	18.22	8.52	0.003	18.22	1.84	0.279	18.22	3.67	0.078
CLLRai0 015	20.38	2.27	0.207	20.38	6.46	0.011	20.38	-0.3	1.23	20.38	1.7	0.307
CLLRai0 016	20.31	3.12	0.115	20.31	8.59	0.003	20.31	1.23	0.425	20.31	1.73	0.302
CLLRai0 017	18.42	4.43	0.047	18.42	10.11	0.001	18.42	1.89	0.27	18.42	4.51	0.044
CLLRai0 018	19.77	3.73	0.076	19.77	7.7	0.005	19.77	0.71	0.61	19.77	2.31	0.202
CLLRai0 019	19.49	3.65	0.08	19.49	8.84	0.002	19.49	1.93	0.262	19.49	3.19	0.109
CLLRai0 020	18.08	2.92	0.132	18.08	8.74	0.002	18.08	1.19	0.437	18.08	3.22	0.107
CLLRai0 021	18.48	5.23	0.027	18.48	8.64	0.003	18.48	1.65	0.318	18.48	3.85	0.069
CLLRai0 022	19.17	3.58	0.083	19.17	10.63	0.001	19.17	2.92	0.133	19.17	3.43	0.093
CLLRai0 023	19.85	5.07	0.03	19.85	8.34	0.003	19.85	1.1	0.468	19.85	3.98	0.063
CLLRai0 024	20.19	2.16	0.224	20.19	6.7	0.01	20.19	-0.49	1.403	20.19	2.46	0.181
CLLRai0 025	19.55	2.43	0.186	19.55	7.4	0.006	19.55	0.27	0.827	19.55	2.3	0.203
CLLRai0 026	20.24	4.35	0.049	20.24	6.31	0.013	20.24	-0.37	1.295	20.24	2.78	0.145
CLLRai0 027	20.02	2.07	0.238	20.02	6.87	0.009	20.02	0.3	0.812	20.02	1.58	0.335
CLLRai0 028	19.76	3.07	0.119	19.76	7.39	0.006	19.76	0.73	0.605	19.76	2.27	0.208
CLLRai0 029	18.81	3.78	0.073	18.81	8.59	0.003	18.81	1.89	0.27	18.81	3.37	0.097
CLLRai0 030	18.65	4.27	0.052	18.65	8.52	0.003	18.65	1.65	0.32	18.65	3.41	0.094
CLLRai0 031	17.62	3.27	0.103	17.62	10.48	0.001	17.62	2.58	0.168	17.62	2.9	0.134
CLLRai0 032	19.17	3.64	0.08	19.17	8.28	0.003	19.17	1.33	0.399	19.17	3.32	0.1

CLLRai0 033	17.91	5.38	0.024	17.91	9.04	0.002	17.91	2.03	0.245	17.91	4.72	0.038
CLLRai0 034	19.6	5.22	0.027	19.6	8.56	0.003	19.6	0.94	0.523	19.6	3.76	0.074
CLLRai0 035	19.17	3.05	0.12	19.17	7.32	0.006	19.17	0.34	0.791	19.17	2.95	0.13
CLLRai0 036	18.57	4.52	0.044	18.57	9.88	0.001	18.57	2.04	0.243	18.57	4.67	0.039
CLLRai0 037	17.71	2.76	0.147	17.71	8.17	0.003	17.71	0.48	0.719	17.71	2.8	0.143
CLLRai0 038	17.98	3.13	0.114	17.98	9.08	0.002	17.98	1.55	0.341	17.98	3.19	0.11
CLLRai0 039	18.06	5.64	0.02	18.06	8.58	0.003	18.06	0.62	0.65	18.06	4.68	0.039
CLLRai0 040	18.58	3.81	0.071	18.58	9.25	0.002	18.58	1.14	0.453	18.58	4.11	0.058
CLLRai0 041	17.62	4.43	0.046	17.62	10.33	0.001	17.62	2.58	0.167	17.62	4.22	0.054
CLLRai0 042	20.17	4.3	0.051	20.17	11.2	0	20.17	2.78	0.145	20.17	5.59	0.021
CLLRai0 043	17.14	4.68	0.039	17.14	8.91	0.002	17.14	1.37	0.386	17.14	4.71	0.038
CLLRai0 044	23.04	-0.08	1.057	23.04	4.91	0.033	23.04	-3.03	8.188	23.04	-0.06	1.039
CLLRai0 045	17.6	3.75	0.074	17.6	12.11	0	17.6	3.86	0.069	17.6	4.69	0.039
CLLRai0 046	17.12	3.96	0.064	17.12	9.29	0.002	17.12	1.69	0.309	17.12	3.65	0.079
CLLRai0 047	17.06	3.52	0.087	17.06	9.04	0.002	17.06	1.4	0.379	17.06	3.57	0.084
CLLRai0 048	18.68	5.36	0.024	18.68	10.29	0.001	18.68	2.13	0.228	18.68	5.46	0.023
CLLRai0 049	17.38	4.21	0.054	17.38	9.25	0.002	17.38	1.72	0.303	17.38	4.26	0.052
CLLRai1-4 001	19.19	4	0.062	19.19	8.44	0.003	19.19	0.99	0.503	19.19	3.34	0.099
CLLRai1-4 002	19.16	2.79	0.145	19.16	7.34	0.006	19.16	0.38	0.768	19.16	3.21	0.108
CLLRai1-4 003	18.63	5.12	0.029	18.63	9.96	0.001	18.63	2.6	0.165	18.63	4.48	0.045
CLLRai1-4 004	18.55	3.7	0.077	18.55	9.22	0.002	18.55	2.01	0.248	18.55	4.41	0.047
CLLRai1-4 005	18.86	5.98	0.016	18.86	8.36	0.003	18.86	1.16	0.446	18.86	4.12	0.057
CLLRai1-4 006	18.67	3.15	0.113	18.67	8.31	0.003	18.67	1.21	0.432	18.67	3.96	0.064
CLLRai1-4 007	18.87	5.38	0.024	18.87	8.59	0.003	18.87	1.33	0.397	18.87	3.77	0.073
CLLRai1-4 008	19.47	5.08	0.029	19.47	9.78	0.001	19.47	1.2	0.434	19.47	5.81	0.018
CLLRai1-4 009	18.99	5.21	0.027	18.99	10.14	0.001	18.99	1.79	0.288	18.99	4.47	0.045
CLLRai1-4 010	19.18	5.35	0.024	19.18	8.7	0.002	19.18	1.08	0.473	19.18	4.46	0.045
CLLRai1-4 011	18.79	3.39	0.095	18.79	7.59	0.005	18.79	0.19	0.877	18.79	2.31	0.202
CLLRai1-4 012	17.93	2.75	0.149	17.93	11.15	0	17.93	2.89	0.135	17.93	2.64	0.16
CLLRai1-4 013	19.29	5.41	0.024	19.29	7.81	0.004	19.29	0.96	0.512	19.29	3.57	0.084
CLLRai1-4 014	18.27	3.33	0.1	18.27	8.93	0.002	18.27	1.55	0.342	18.27	3.63	0.081
CLLRai1-4 015	18.48	2.77	0.147	18.48	7.79	0.005	18.48	0.97	0.51	18.48	3.1	0.117
CLLRai1-4 016	18.85	3.26	0.104	18.85	8.82	0.002	18.85	1.76	0.295	18.85	3.68	0.078
CLLRai1-4 017	17.42	4.09	0.059	17.42	10.99	0	17.42	3.71	0.076	17.42	3.83	0.07
CLLRai1-4 018	18.2	5.14	0.028	18.2	9.24	0.002	18.2	2.4	0.19	18.2	4.15	0.056
CLLRai1-4 019	18.76	4.65	0.04	18.76	8.68	0.002	18.76	1.62	0.326	18.76	4.26	0.052
CLLRai1-4 020	18.36	5.18	0.028	18.36	8.82	0.002	18.36	2.17	0.222	18.36	3.88	0.068
CLLRai1-4 021	17.86	3.32	0.1	17.86	7.92	0.004	17.86	0.78	0.584	17.86	3.74	0.075

CLLRai1-4 022	18.46	3.47	0.09	18.46	9.03	0.002	18.46	1.63	0.323	18.46	4.19	0.055
CLLRai1-4 023	19.26	1.52	0.348	19.26	6.28	0.013	19.26	-0.49	1.407	19.26	1.97	0.256
CLLRai1-4 024	19	3.1	0.116	19	7.34	0.006	19	0.55	0.681	19	2.1	0.234
CLLRai1-4 025	19.24	2.67	0.157	19.24	6.95	0.008	19.24	0.15	0.904	19.24	1.95	0.258
CLLRai1-4 026	19.1	3.83	0.07	19.1	8	0.004	19.1	0.93	0.526	19.1	2.5	0.177
CLLRai1-4 027	19.4	1.78	0.291	19.4	7.49	0.006	19.4	-0.18	1.13	19.4	1.39	0.382
CLLRai1-4 028	19.34	5.89	0.017	19.34	7.12	0.007	19.34	0.39	0.763	19.34	4.1	0.058
CLLRai1-4 029	20.17	2.47	0.18	20.17	7.36	0.006	20.17	0.28	0.821	20.17	2.13	0.228
CLLRai1-4 030	19.99	1.36	0.39	19.99	6.12	0.014	19.99	-0.78	1.718	19.99	1.71	0.305
CLLRai1-4 031	19.54	2.48	0.179	19.54	6.46	0.011	19.54	-0.17	1.125	19.54	2.14	0.228
CLLRai1-4 032	19.79	2.24	0.211	19.79	5.58	0.021	19.79	-1.34	2.538	19.79	1.76	0.295
CLLRai1-4 033	19.64	5.22	0.027	19.64	7.12	0.007	19.64	0.02	0.983	19.64	3.28	0.103
CLLRai1-4 034	19.18	4.25	0.052	19.18	7.63	0.005	19.18	0.88	0.544	19.18	3	0.125
CLLRai1-4 035	19.63	3.87	0.069	19.63	7.42	0.006	19.63	0.2	0.868	19.63	2.83	0.141
CLLRai1-4 036	18.27	4.97	0.032	18.27	10.59	0.001	18.27	1.85	0.277	18.27	5.65	0.02
CLLRai1-4 037	18.13	3.35	0.098	18.13	9.32	0.002	18.13	1.97	0.256	18.13	4.64	0.04
CLLRai1-4 038	18.3	4.69	0.039	18.3	9.04	0.002	18.3	1.58	0.336	18.3	4.17	0.055
CLLRai1-4 039	19.48	4.11	0.058	19.48	8.63	0.003	19.48	1.38	0.383	19.48	2.98	0.126
CLLRai1-4 040	18.31	1.42	0.374	18.31	12.41	0	18.31	2.57	0.168	18.31	1.29	0.408
CLLRai1-4 041	18.45	1.94	0.26	18.45	7.68	0.005	18.45	-0.15	1.111	18.45	3.25	0.105
CLLRai1-4 042	19.92	3.47	0.09	19.92	9.62	0.001	19.92	1.35	0.391	19.92	4.31	0.05
CLLRai1-4 043	20.12	2.57	0.168	20.12	8.69	0.002	20.12	0.73	0.604	20.12	3.31	0.101
CLLRai1-4 044	19.35	2.81	0.142	19.35	9.16	0.002	19.35	1.01	0.496	19.35	3.89	0.068

NA = not available.

Supplementary Table 4. miRNA expression in plasma from patients with chronic lymphocytic leukemia (CLL) (groups B, C, and D; raw data).

ID	miR-155			miR-21		
	miR-16	ΔC(t)	Relative expression	miR-16	ΔC(t)	Relative expression
CLL001	25.83	5.54	0.021	25.83	1.24	0.423
CLL002	24.74	6.31	0.013	24.74	0.3	0.81
CLL003	28.02	3.51	0.088	28.02	0.09	0.937
CLL004	26.9	4.16	0.056	26.9	0.03	0.983
CLL005	25.03	6.1	0.015	25.03	0.82	0.567
CLL006	26.32	4.03	0.061	26.32	0.29	0.817
CLL007	27.24	3.5	0.089	27.24	1.18	0.441
CLL008	25.17	5.04	0.03	25.17	0.3	0.811
CLL009	24.84	5.56	0.021	24.84	0.44	0.738
CLL010	26.71	4.7	0.039	26.71	0.33	0.794
CLL011	26.38	3.92	0.066	26.38	-0.48	1.397
CLL012	25.55	4.81	0.036	25.55	0.73	0.605
CLL013	24.29	6.07	0.015	24.29	1.21	0.433
CLL014	22.63	5.45	0.023	22.63	1.23	0.427
CLL015	22.46	5.36	0.024	22.46	2.28	0.206
CLL016	24.68	4.36	0.049	24.68	0.96	0.515
CLL017	28.53	3.12	0.115	28.53	1.06	0.48
CLL018	25.37	4.03	0.061	25.37	0.66	0.635
CLL019	27.91	3.81	0.071	27.91	0.87	0.549
CLL020	27.42	2.04	0.242	27.42	0.07	0.951
CLL021	25.66	5.27	0.026	25.66	1.17	0.445
CLL022	25.61	5.69	0.019	25.61	1.54	0.343
CLL023	24.7	5.97	0.016	24.7	0.32	0.801
CLL024	27.77	3.7	0.077	27.77	0.02	0.985
CLL025	23.74	4.92	0.033	23.74	0.41	0.753
CLL026	26.62	4.32	0.05	26.62	0.71	0.613

CLL027	28.27	3.02	0.123	28.27	0.82	0.566
CLL028	23.69	4.19	0.055	23.69	1.2	0.435
CLL029	21.28	5.25	0.026	21.28	2.41	0.189
CLL030	25.72	5.35	0.024	25.72	0.44	0.738
CLL031	24.67	6.38	0.012	24.67	0.54	0.687
CLL032	25.25	5.73	0.019	25.25	-0.19	1.139
CLL033	23.71	6.33	0.012	23.71	1.45	0.365
CLL034	26.78	6.46	0.011	26.78	0.56	0.681
CLL035	25.07	6.65	0.01	25.07	0.45	0.734
CLL036	27.13	3.54	0.086	27.13	-0.25	1.193
CLL037	22.84	5.52	0.022	22.84	0.47	0.721
CLL038	25.65	4.34	0.049	25.65	0.71	0.613
CLL039	26.14	5.67	0.02	26.14	0.24	0.847
CLL040	24.94	7.13	0.007	24.94	0.73	0.604
CLL041	25.32	6.09	0.015	25.32	0.47	0.723
CLL042	24.92	3.07	0.119	24.92	-0.6	1.512
CLL043	24.92	3.95	0.065	24.92	0.21	0.866
CLL044	24.9	3.86	0.069	24.9	0.36	0.777
CLL045	25.28	4.93	0.033	25.28	-0.3	1.23
CLL046	24.77	6.4	0.012	24.77	0.39	0.762
CLL047	26.3	5.2	0.027	26.3	-0.03	1.018
CLL048	26.58	4.58	0.042	26.58	-0.27	1.205
CLL049	24.32	6.03	0.015	24.32	0.4	0.757
CLL050	30.24	1.82	0.282	30.24	-1	1.993
CLL051	26.53	4.23	0.053	26.53	-1.29	2.442
CLL052	25.89	4.15	0.056	25.89	-0.11	1.077
CLL053	26.64	4.77	0.037	26.64	-0.3	1.235
CLL054	26.66	4.61	0.041	26.66	-0.37	1.293
CLL055	27.31	4.52	0.044	27.31	-0.02	1.013
CLL056	26.88	4.08	0.059	26.88	-0.31	1.243
CLL057	24.24	5.36	0.024	24.24	0.31	0.804

CLL058	26.47	5.11	0.029	26.47	0.07	0.953
CLL059	27.11	3.24	0.106	27.11	-1.18	2.265
CLL060	25.79	6.25	0.013	25.79	0.5	0.705
CLL061	24.99	6.4	0.012	24.99	1.11	0.462
CLL062	25.77	3.06	0.12	25.77	0.34	0.792
CLL063	25.81	3.81	0.071	25.81	0.2	0.868
CLL064	27.04	4.34	0.049	27.04	0.21	0.864
CLL065	27.5	4.7	0.039	27.5	0.37	0.776
CLL066	25.23	6.31	0.013	25.23	-0.01	1.006
CLL067	26.82	6.54	0.011	26.82	0.17	0.891
CLL068	30.19	2	0.251	30.19	-0.78	1.717
CLL069	26.73	4.42	0.047	26.73	0.52	0.695
CLL070	25.01	3.25	0.105	25.01	0.31	0.808
CLL071	24.62	4.1	0.058	24.62	1.97	0.256
CLL072	26.87	4.48	0.045	26.87	0.14	0.906
CLL073	26.65	5.12	0.029	26.65	1.51	0.352
CLL074	23.08	3.21	0.108	23.08	0.59	0.665
CLL075	21.16	7.85	0.004	21.16	1.46	0.364
CLL076	24.41	4.39	0.048	24.41	2.11	0.232
CLL077	23.32	6.61	0.01	23.32	0.99	0.502
CLL078	26.19	5.56	0.021	26.19	0.66	0.633
CLL079	24.51	3.89	0.067	24.51	1.92	0.263
CLL080	21.27	5.09	0.029	21.27	2.18	0.221
CLL081	23.33	2.09	0.235	23.33	0.95	0.516
CLL082	24.74	5.34	0.025	24.74	0.48	0.716
CLL083	23.74	7.88	0.004	23.74	1.05	0.483
CLL084	25.3	2.35	0.197	25.3	0.61	0.656
CLL085	26.22	6.18	0.014	26.22	3	0.125
CLL086	27.84	4.56	0.042	27.84	1.64	0.32
CLL087	24.73	5.24	0.026	24.73	2.6	0.165
CLL088	26.5	5.73	0.019	26.5	1.88	0.271

CLL089	24.16	7.13	0.007	24.16	1.93	0.263
CLL090	25.03	5.78	0.018	25.03	2.01	0.248
CLL091	25.26	5.49	0.022	25.26	2.28	0.206
CLL092	25.61	5.24	0.026	25.61	1.84	0.279
CLL093	24.32	5.22	0.027	24.32	1.2	0.434
CLL094	25.12	2.31	0.201	25.12	1.13	0.458
CLL095	25.39	3.15	0.113	25.39	1.87	0.274
CLL096	24.78	6.09	0.015	24.78	2.14	0.226
CLL097	23.45	4.63	0.04	23.45	1.8	0.287
CLL098	25.79	4.37	0.048	25.79	2.21	0.217
CLL099	26.76	3.71	0.076	26.76	1.33	0.398
CLL100	27.43	2.8	0.143	27.43	2.45	0.183
CLL101	26.86	5.48	0.022	26.86	1.84	0.279
CLL102	27.4	5.76	0.019	27.4	1.41	0.377
CLL103	27.28	4.41	0.047	27.28	2.14	0.226
CLL104	25.2	4.56	0.042	25.2	2.33	0.199
CLL105	27.14	5	0.031	27.14	1.97	0.254
CLL106	24.6	7.72	0.005	24.6	2.66	0.159
CLL107	26.33	5.9	0.017	26.33	2.67	0.157
CLL108	26.62	5.75	0.019	26.62	1.74	0.299
CLL109	25.69	2.57	0.169	25.69	2.67	0.157
CLL110	25.61	1.02	0.492	25.61	1.27	0.413
CLL111	25.1	5.45	0.023	25.1	2.71	0.153
CLL112	24.43	3.37	0.097	24.43	2.2	0.218
CLL113	25.82	3.4	0.095	25.82	1.03	0.488
CLL114	26.21	6.33	0.012	26.21	1.95	0.258
CLL115	24.33	5.05	0.03	24.33	2.7	0.154
CLL116	26.54	5.78	0.018	26.54	2.01	0.248
CLL117	22.73	3.85	0.07	22.73	1.1	0.468
CLL118	26.52	4.25	0.052	26.52	1.8	0.287
CLL119	24.37	5.52	0.022	24.37	1.53	0.347

CLL120	24.12	5.37	0.024	24.12	1.89	0.269
CLL121	25.19	5.15	0.028	25.19	1.23	0.426
CLL122	25.24	5.62	0.02	25.24	1.52	0.349
CLL123	24.97	2.22	0.214	24.97	2.25	0.21
CLL124	23.73	3.42	0.093	23.73	1.54	0.345
CLL125	24.45	7.33	0.006	24.45	2.93	0.131
CLL126	28.41	2.64	0.161	28.41	2.15	0.225
CLL127	26.6	4.18	0.055	26.6	2.92	0.132
CLL128	24.79	5.21	0.027	24.79	2.67	0.157
CLL129	23.26	4.4	0.047	23.26	1.52	0.348
CLL130	25.58	2.58	0.167	25.58	2.45	0.183
CLL131	21.58	3.64	0.08	21.58	2.25	0.21
CLL132	23.35	3.94	0.065	23.35	1.51	0.352
CLL133	24.14	3.85	0.07	24.14	1.96	0.256
CLL134	19.57	5.57	0.021	19.57	4.56	0.042
CLL135	23.25	4.4	0.047	23.25	1.89	0.269
CLL136	27.88	0.5	0.709	27.88	0.26	0.833
CLL137	25.9	4.57	0.042	25.9	2.81	0.143
CLL138	24.09	6.05	0.015	24.09	2.6	0.165
CLL139	26.92	1.01	0.498	26.92	2.29	0.205
CLL140	24.8	5.7	0.019	24.8	2.67	0.158
CLL141	24.53	3.56	0.085	24.53	1.81	0.285
CLL142	24.19	2.51	0.175	24.19	1.86	0.276
CLL143	22.41	4.11	0.058	22.41	3.16	0.112
CLL144	25.48	5.28	0.026	ND	ND	ND
CLL145	22.67	3.37	0.097	ND	ND	ND
CLL146	23.55	3.41	0.094	ND	ND	ND
CLL147	25.12	4.48	0.045	ND	ND	ND
CLL148	23.47	4.81	0.036	ND	ND	ND
CLL149	21.65	6.39	0.012	ND	ND	ND
CLL150	25.33	4.73	0.038	ND	ND	ND

CLL151	24.11	5.86	0.017	ND	ND	ND
CLL152	23.86	4.44	0.046	ND	ND	ND
CLL153	25.99	4.69	0.039	ND	ND	ND
CLL154	24.55	5.46	0.023	ND	ND	ND
CLL155	24.51	6.84	0.009	ND	ND	ND
CLL156	25.04	5	0.031	ND	ND	ND
CLL157	24.91	3.92	0.066	ND	ND	ND
CLL158	24.21	2.25	0.21	ND	ND	ND
CLL159	24.47	6.67	0.01	ND	ND	ND
CLL160	24.07	1.19	0.44	ND	ND	ND
CLL161	22.84	3.12	0.115	ND	ND	ND
CLL162	22.18	3.07	0.119	ND	ND	ND
CLL163	20.74	4.25	0.053	ND	ND	ND
CLL164	24.42	3.67	0.079	ND	ND	ND
CLL165	27.84	1.82	0.284	ND	ND	ND
CLL166	24.88	4.66	0.04	ND	ND	ND
CLL167	22.73	3.44	0.092	ND	ND	ND
CLL168	24.84	3.85	0.069	ND	ND	ND
CLL169	25.43	4.39	0.048	ND	ND	ND
CLL170	24.82	3.97	0.064	ND	ND	ND
CLL171	22.66	4.35	0.049	ND	ND	ND
CLL172	24.92	4.67	0.039	ND	ND	ND
CLL173	26.84	5.31	0.025	ND	ND	ND
CLL174	25.03	5.15	0.028	ND	ND	ND
CLL175	24.54	4.2	0.054	24.54	0.79	0.578
CLL176	26.71	4.15	0.056	26.71	0.73	0.605
CLL177	24.91	0.82	0.566	24.91	-0.52	1.434
CLL178	21.99	0.18	0.883	21.99	1.92	0.265
CLL179	24.62	-0.48	1.4	24.62	0.53	0.694
CLL180	27.15	-0.23	1.173	27.15	-1	1.997
CLL181	24.21	3.03	0.123	24.21	0.75	0.593

CLL182	24.08	4.09	0.059	24.08	0.7	0.615
CLL183	24.87	2.56	0.17	24.87	1.9	0.267
CLL184	24.38	-0.68	1.6	24.38	0.73	0.602
CLL185	24.46	-0.64	1.557	24.46	-1.06	2.085
CLL186	22.86	-0.08	1.055	22.86	0.41	0.751
CLL187	21.64	2.36	0.195	21.64	1.93	0.262
CLL188	24.18	0.53	0.692	24.18	0.46	0.728
CLL189	27.43	3.29	0.102	27.43	-0.05	1.036
CLL190	25.57	0.53	0.691	25.57	-0.28	1.218
CLL191	24.85	NA	NA	24.85	1.65	0.319
CLL192	25.93	NA	NA	25.93	2.15	0.226
CLL193	25.84	1.36	0.39	25.84	0.5	0.709
CLL194	20.4	-2.01	4.018	20.4	0.22	0.859
CLL195	23.27	-0.84	1.794	23.27	0.43	0.743
CLL196	20.51	6.22	0.013	20.51	3.69	0.078
CLL197	24.96	3.43	0.093	24.96	0.26	0.837
CLL198	26	0.31	0.806	26	-0.62	1.538
CLL199	26.4	1.35	0.391	26.4	0.81	0.571
CLL200	27.09	NA	NA	27.09	2.81	0.142
CLL201	25.1	4.02	0.062	25.1	-0.69	1.615
CLL202	25.806	6.424	0.012	25.806	-0.817	1.762
CLL203	26.094	5.674	0.02	26.094	-0.653	1.572
CLL204	27.701	5.546	0.021	27.701	-1.029	2.041
CLL205	25.416	7.621	0.005	25.416	0.119	0.921
CLL206	24.123	6.096	0.015	24.123	1.079	0.473
CLL207	27.233	6.229	0.013	27.233	-0.318	1.246
CLL208	26.795	7.369	0.006	26.795	0.415	0.75
CLL209	26.603	NA	NA	26.603	-0.044	1.031
CLL210	25.63	6.82	0.009	25.63	1.098	0.467
CLL211	26.382	6.181	0.014	26.382	-0.334	1.26
CLL212	26.585	7.851	0.004	26.585	0.745	0.597

CLL213	26.078	6.324	0.012	26.078	0.747	0.596
CLL214	28.077	NA	NA	28.077	0.827	0.564
CLL215	26.298	4.196	0.055	26.298	-2.353	5.108
CLL216	25.873	6.886	0.008	25.873	0.135	0.911
CLL217	25.202	5.804	0.018	25.202	-0.928	1.903
CLL218	25.042	7.036	0.008	25.042	0.5	0.707
CLL219	27.203	5.262	0.026	27.203	-1.691	3.228
CLL220	29.317	5.689	0.019	29.317	-1.3	2.463
CLL221	26.51	5.737	0.019	26.51	-0.875	1.834
CLL222	25.377	6.308	0.013	25.377	0.993	0.503
CLL223	28.098	6.921	0.008	28.098	-0.838	1.788
CLL224	25.33	7.63	0.005	25.33	0.941	0.521
CLL225	26.336	6.589	0.01	26.336	0.779	0.583
CLL226	28.395	NA	NA	28.395	-0.919	1.891
CLL227	25.4	NA	NA	25.4	1.294	0.408
CLL228	26.367	4.997	0.031	26.367	0.299	0.813

ND = not done; NA = not available. When expression values for the endogenous control or for a specific miRNA were not obtained after 35 cycles of amplification in 2 successive experiments in duplicate wells, the specific values were considered to be unavailable.