

SUPPLEMENTARY INFORMATION

Frequent evolution of copy number alterations in CLL following first-line treatment with FC(R) is enriched with *TP53* alterations:

Results from the CLL8 trial

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Supplementary Methods

The present study included sequential peripheral blood samples from 103 individuals enrolled on the CLL8 trial of the German CLL study group. Written informed consent and local ethics committee approval was obtained in accordance with the Declaration of Helsinki for all patients. Mononuclear cells were isolated by Ficoll density gradient centrifugation. An immuno-magnetic tumor cell enrichment via CD19 (Midi MACS, Miltenyi Biotec®, Bergisch Gladbach, Germany) was performed on all 103 treatment-initiation samples, on 15 of the 86 relapse samples, but not on the pre-treatment samples. In 52 cases the CD19-negative cell fraction contained less than 5% CD19/CD5 co-expressing cells and could therefore be used as intra-individual reference DNA.

Genomic DNA was extracted (Allprep DNA/RNA midi kit; Quiagen®, Hilden) and hybridized to the Genome-Wide Human SNP Array 6.0 according to the manufacturer's protocol (Affymetrix®, Santa Clara, CA, USA). SNP genotype calls were generated by applying the birdseed algorithm in Genotyping Console version 4.0 (Affymetrix®) using at least 50 arrays in each analysis. DNA copy number analyses were performed using reference alignment^[1], dChipSNP^[2] and circular binary segmentation^[3].

Segmentation was done pairwise against intra-individual reference DNA in 52 cases having a pure CD19 negative cell-fraction. For the 51 cases lacking matched normal material the segmentation of each sample was computed against a pool of ten gender-matched reference samples. Resulting segments with a window of five consecutive markers and mean log₂-ratios of > 0.2 and < -0.2 were visually inspected using dChipSNP to exclude inherited copy number variants and false calls due to experimental artifacts (noise or interbatch effects).

Lesions occurring in a subclone with a clone size under 25 % were revised using the aroma.affymetrix software package^[4] for an exact determination of segment boundaries.

LOH analyses were performed using dChipSNP^[2]. To determine CN-LOH acquired over time, treatment-initiation samples were computed against their pre-treatment samples and relapse samples were computed against their treatment-initiation sample. According to prior experience, CN-LOH was considered to be a true lesion when containing homozygous SNPs in at least 20 consecutive markers with less than 10 % intervening or conflicting calls^[5].

Size position and location of genes were identified with the UCSC Genome Browser; assembly March 2006, NCBI36/hg18 (<http://www.genome.ucsc.edu/>). Microarray raw data were made publicly available at Gene Expression Omnibus (GEO accession number: GSE83566).

All coding exons of *TP53* and *ATM* were screened for mutations by whole exome sequencing (WES) [N=108] or by amplicon based targeted next generation sequencing [N=150; N=42 samples analyzed on both platforms]. Libraries for whole exome sequencing were constructed on an Agilent[®] platform and sequenced on an Illumina[®] HiSeq2000 or HiSeq2500 using 76 bp paired-end reads. For targeted sequencing we used Illumina[®] Design Studio to create custom amplicons with a size of 250 bp covering all coding regions of *TP53* and *ATM*. Library preparation was performed using TruSeq Custom Amplicon Assay Kit v1.5 (Illumina[®], San Diego, CA,USA) including extension and ligation steps between custom probes and adding of indices. Samples were pooled and loaded on a MiSeq flowcell in 48 sample batches and sequenced with MiSeq Reagent Kit 500v2 (Illumina[®]) for a paired end run. Median depths of WES and targeted sequencing were 96 x and 1332 x, respectively. Different software packages for bioinformatic analyses including

demultiplexing, alignment to hg19 reference genome, variant calling and annotation were used as described elsewhere [6].

References Supplementary Methods:

- [1] Pounds S, Cheng C, Mullighan C, Raimondi SC, Shurtleff S, Downing JR. Reference alignment of SNP microarray signals for copy number analysis of tumors. *Bioinformatics* 2009; **25**: 315-321.
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Supplementary Table S1:

CLL-cases with sequential samples studied by SNP-array based copy-number- and LOH-analysis.

Sample-ID	CD19 Enrichment	IGHV	FISH					TP53 mutation	ATM mutation	Clonal Evolution	
			normal	del(13q)	+12	del(11q)	del(17p)			CNAs	TP53
CLL001_pre-treatment	no	mutated		X						no	no
CLL001_first treatment	yes			X							
CLL002_pre-treatment	no	mutated		X						no	no
CLL002_first treatment	yes			X							
CLL003_pre-treatment	no	unmutated	X							no	no
CLL003_first treatment	yes		X								
CLL004_pre-treatment	no	unmutated			X					no	no
CLL004_first treatment	yes				X						
CLL005_pre-treatment	no	unmutated		X					X	no	no
CLL005_first treatment	yes			X					X		
CLL006_pre-treatment	no	mutated		X						yes	no
CLL006_first treatment	yes			X		X					
CLL007_pre-treatment	no	unmutated		X						no	no
CLL007_first treatment	yes			X							
CLL008_pre-treatment	no	mutated	X							no	no
CLL008_first treatment	yes		X								
CLL009_pre-treatment	no	unmutated		X		X				no	no
CLL009_first treatment	yes			X		X					
CLL010_pre-treatment	no	mutated		X						no	no
CLL010_first treatment	yes			X							
CLL011_pre-treatment	no	unmutated		X		X				yes	no
CLL011_first treatment	yes			X		X					

Sample-ID	CD19 Enrichment	IGHV	FISH					TP53 mutation	ATM mutation	Clonal Evolution	
			normal	del(13q)	+12	del(11q)	del(17p)			CNAs	TP53
CLL012_pre-treatment	no	unmutated		X				X		no	no
CLL012_first treatment	yes			X				X			
CLL013_pre-treatment	no	mutated		X					X	yes	no
CLL013_first treatment	yes			X		X			X		
CLL014_pre-treatment	no	mutated		X						no	no
CLL014_first treatment	yes			X							
CLL015_pre-treatment	no	mutated	X							no	no
CLL015_first treatment	yes		X								
CLL016_pre-treatment	no	mutated		X						no	no
CLL016_first treatment	yes			X							
CLL017_pre-treatment	no	unmutated		X		X		X		no	no
CLL017_first treatment	yes			X		X		X			
CLL018_pre-treatment	no	unmutated		X		X			X	no	no
CLL018_first treatment	yes			X		X			X		
CLL018_post treatment	no			X		X			X		
CLL019_pre-treatment	no	unmutated	X						X	no	no
CLL019_first treatment	yes		X						X		
CLL019_post treatment	no		X						X		
CLL020_pre-treatment	no	mutated		X						no	no
CLL020_first treatment	yes			X							
CLL020_post treatment	no			X							
CLL021_pre-treatment	no	mutated		X		X				no	no
CLL021_first treatment	yes			X		X					
CLL021_post treatment	no			X		X					

Sample-ID	CD19 Enrichment	IGHV	FISH					TP53 mutation	ATM mutation	Clonal Evolution	
			normal	del(13q)	+12	del(11q)	del(17p)			CNAs	TP53
CLL022_pre-treatment	no	unmutated					X	X		no	no
CLL022_first treatment	yes						X	X			
CLL022_post treatment	no						X	X			
CLL023_pre-treatment	no	unmutated	X					X		no	no
CLL023_first treatment	yes		X					X			
CLL023_post treatment	no						X	X			
CLL024_pre-treatment	no	unmutated		X		X				no	no
CLL024_first treatment	yes			X		X					
CLL024_post treatment	yes			X		X					
CLL025_pre-treatment	no	unmutated	X							yes	no
CLL025_first treatment	yes					X					
CLL025_post treatment	yes			X		X					
CLL026_pre-treatment	no	unmutated		X		X			X	yes	no
CLL026_first treatment	yes			X		X			X		
CLL026_post treatment	no			X		X					
CLL027_pre-treatment	no	unmutated					X			no	no
CLL027_first treatment	yes						X	X			
CLL027_post treatment	no						X	X			
CLL028_first treatment	yes	mutated				X			X	yes	no
CLL028_post treatment	no			X		X			X		
CLL029_first treatment	yes	mutated		X				X		yes	no
CLL029_post treatment	no			X				X			
CLL030_first treatment	yes	mutated		X				X		yes	no
CLL030_post treatment	no			X			X	X			

Sample-ID	CD19 Enrichment	IGHV	FISH					TP53 mutation	ATM mutation	Clonal Evolution	
			normal	del(13q)	+12	del(11q)	del(17p)			CNAs	TP53
CLL031_first treatment	yes	unmutated		X			X	X		no	no
CLL031_post treatment	yes			X			X	X			
CLL032_first treatment	yes	unmutated				X				yes	no
CLL032_post treatment	no			X		X					
CLL033_first treatment	yes	unmutated			X					no	no
CLL033_post treatment	no				X						
CLL034_first treatment	yes	unmutated	X							no	no
CLL034_post treatment	no			X							
CLL035_first treatment	yes	unmutated					X	X		yes	yes
CLL035_post treatment	no						X	X			
CLL036_first treatment	yes	mutated		X						no	no
CLL036_post treatment	no				X						
CLL037_first treatment	yes	unmutated			X					no	yes
CLL037_post treatment	no				X			X			
CLL038_first treatment	yes	mutated		X						no	no
CLL038_post treatment	no				X						
CLL039_first treatment	yes	mutated		X						yes	no
CLL039_post treatment	no				X		X		X		
CLL040_first treatment	yes	unmutated		X		X	X			yes	no
CLL040_post treatment	no				X		X	X			
CLL041_first treatment	yes	unmutated		X						no	no
CLL041_post treatment	no				X						
CLL042_first treatment	yes	unmutated		X						yes	yes
CLL042_post treatment	no				X			X			

Sample-ID	CD19 Enrichment	IGHV	FISH					TP53 mutation	ATM mutation	Clonal Evolution	
			normal	del(13q)	+12	del(11q)	del(17p)			CNAs	TP53
CLL043_first treatment	yes	unmutated	X							yes	no
CLL043_post treatment	no			X							
CLL044_first treatment	yes	unmutated		X		X				yes	no
CLL044_post treatment	no			X		X	X				
CLL045_first treatment	yes	unmutated	X					X		no	no
CLL045_post treatment	no			X				X			
CLL046_first treatment	yes	unmutated	X							no	no
CLL046_post treatment	no			X							
CLL047_first treatment	yes	unmutated				X				yes	no
CLL047_post treatment	no			X							
CLL048_first treatment	yes	unmutated		X						yes	no
CLL048_post treatment	no				X		X				
CLL049_first treatment	yes	unmutated		X		X				no	yes
CLL049_post treatment	no				X		X	X			
CLL050_first treatment	yes	unmutated		X		X				no	no
CLL050_post treatment	yes				X		X				
CLL051_first treatment	yes	unmutated	X							no	no
CLL051_post treatment	no			X							
CLL052_first treatment	yes	mutated	X							no	no
CLL052_post treatment	no			X							
CLL053_first treatment	yes	unmutated		X						no	yes
CLL053_post treatment	no				X			X			
CLL054_first treatment	yes	unmutated		X		X			X	yes	yes
CLL054_post treatment	yes						X	X	X		

Sample-ID	CD19 Enrichment	IGHV	FISH					TP53 mutation	ATM mutation	Clonal Evolution	
			normal	del(13q)	+12	del(11q)	del(17p)			CNAs	TP53
CLL055_first treatment	yes	unmutated		X		X			no	no	
CLL055_post treatment	no			X		X		X			
CLL056_first treatment	yes	unmutated		X		X			no	no	
CLL056_post treatment	no			X		X					
CLL057_first treatment	yes	unmutated		X		X			no	no	
CLL057_post treatment	no			X		X					
CLL058_first treatment	yes	unmutated				X		X	no	no	
CLL058_post treatment	no					X		X			
CLL059_first treatment	yes	unmutated				X		X	no	no	
CLL059_post treatment	no					X		X			
CLL060_first treatment	yes	unmutated	X						no	yes	
CLL060_post treatment	no		X				X	X			
CLL061_first treatment	yes	unmutated	X						yes	no	
CLL061_post treatment	no		X								
CLL062_first treatment	yes	mutated			X				no	no	
CLL062_post treatment	yes				X						
CLL063_first treatment	yes	unmutated			X				yes	yes	
CLL063_post treatment	no				X		X	X			
CLL064_first treatment	yes	unmutated		X				X	no	no	
CLL064_post treatment	no			X				X			
CLL065_first treatment	yes	mutated	X						no	no	
CLL065_post treatment	yes		X								
CLL066_first treatment	yes	unmutated		X					no	no	
CLL066_post treatment	no			X							

Sample-ID	CD19 Enrichment	IGHV	FISH					TP53 mutation	ATM mutation	Clonal Evolution	
			normal	del(13q)	+12	del(11q)	del(17p)			CNAs	TP53
CLL067_first treatment	yes	mutated		X		X				yes	no
CLL067_post treatment	no			X		X					
CLL068_first treatment	yes	unmutated		X		X				yes	yes
CLL068_post treatment	no			X		X	X	X			
CLL069_first treatment	yes	mutated		X		X				no	no
CLL069_post treatment	no			X		X					
CLL070_first treatment	yes	unmutated		X						yes	yes
CLL070_post treatment	no			X			X	X			
CLL071_first treatment	yes	unmutated		X				X		no	no
CLL071_post treatment	yes			X				X			
CLL072_first treatment	yes	unknown		X						no	no
CLL072_post treatment	yes			X							
CLL073_first treatment	yes	unmutated		X		X				yes	yes
CLL073_post treatment	yes			X		X	X	X			
CLL074_first treatment	yes	unmutated		X			X	X		no	no
CLL074_post treatment	no			X			X	X			
CLL075_first treatment	yes	unmutated		X		X			X	no	no
CLL075_post treatment	no			X		X			X		
CLL076_first treatment	yes	unmutated	X							no	yes
CLL076_post treatment	yes			X				X			
CLL077_first treatment	yes	mutated		X				X		no	no
CLL077_post treatment	yes				X			X			
CLL078_first treatment	yes	unmutated	X							yes	no
CLL078_post treatment	no				X						

Sample-ID	CD19 Enrichment	IGHV	FISH					TP53 mutation	ATM mutation	Clonal Evolution	
			normal	del(13q)	+12	del(11q)	del(17p)			CNAs	TP53
CLL079_first treatment	yes	unmutated		X						no	no
CLL079_post treatment	yes			X							
CLL080_first treatment	yes	unmutated		X						no	no
CLL080_post treatment	no			X							
CLL081_first treatment	yes	unmutated				X				no	no
CLL081_post treatment	yes					X					
CLL082_first treatment	yes	unmutated					X	X		no	no
CLL082_post treatment	no						X	X			
CLL083_first treatment	yes	unmutated			X					no	no
CLL083_post treatment	no				X						
CLL084_first treatment	yes	unmutated		X						yes	no
CLL084_post treatment	no			X							
CLL085_first treatment	yes	unmutated				X				no	no
CLL085_post treatment	no					X					
CLL086_first treatment	yes	unmutated	X							no	no
CLL086_post treatment	no		X								
CLL087_first treatment	yes	unmutated		X		X				no	no
CLL087_post treatment	yes			X		X					
CLL088_first treatment	yes	unmutated	X							yes	no
CLL088_post treatment	no		X								
CLL089_first treatment	yes	unmutated		X		X			X	yes	no
CLL089_post treatment	no			X		X			X		
CLL090_first treatment	yes	unmutated		X		X			X	no	no
CLL090_post treatment	no			X		X			X		

Sample-ID	CD19 Enrichment	IGHV	FISH					TP53 mutation	ATM mutation	Clonal Evolution	
			normal	del(13q)	+12	del(11q)	del(17p)			CNAs	TP53
CLL091_first treatment	yes	mutated	X							no	no
CLL091_post treatment	no		X								
CLL092_first treatment	yes	mutated		X						no	no
CLL092_post treatment	no			X							
CLL093_first treatment	yes	mutated	X							yes	yes
CLL093_post treatment	no						X	X			
CLL094_first treatment	yes	unknown			X					no	no
CLL094_post treatment	no				X						
CLL095_first treatment	yes	mutated		X		X				no	no
CLL095_post treatment	no			X		X					
CLL096_first treatment	yes	mutated		X						yes	no
CLL096_post treatment	no			X				X			
CLL097_first treatment	yes	unmutated		X		X				no	no
CLL097_post treatment	no			X		X					
CLL098_first treatment	yes	unmutated		X		X				no	no
CLL098_post treatment	no			X		X					
CLL099_first treatment	yes	mutated		X		X			X	yes	no
CLL099_post treatment	no			X		X			X		
CLL100_first treatment	yes	unmutated	X							yes	yes
CLL100_post treatment	no						X	X			
CLL101_first treatment	yes	unmutated			X					yes	no
CLL101_post treatment	no				X						
CLL102_first treatment	yes	unmutated		X		X			X	yes	no
CLL102_post treatment	no			X		X			X		

Sample-ID	CD19 Enrichment	IGHV	FISH					TP53 mutation	ATM mutation	Clonal Evolution	
			normal	del(13q)	+12	del(11q)	del(17p)			CNAs	TP53
CLL103_first treatment	yes	mutated	X							no	yes
CLL103_post treatment	no		X					X			

Supplementary Table S2:

Observed copy number alterations (CNAs) for each case within the sequential samples of 103 analyzed cases. CNAs are listed for each case by providing start and stop positions referring to the UCSC Genome Browser; assembly March 2006, NCBI36/hg18 (<http://www.genome.ucsc.edu/>) and providing the mean log2 ratio over each segment.

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL001_pre-treatment	13	q14.2-q14.3	47,660,311	50,063,894	2,403,583	loss	-0.912
CLL001_first treatment	13	q14.2-q14.3	47,660,311	50,063,894	2,403,583	loss	-0.963
CLL002_pre-treatment	13	q14.3	49,142,151	50,470,735	1,328,584	loss	-0.617
CLL002_first treatment	13	q14.3	49,142,151	50,470,735	1,328,584	loss	-1.251
CLL003_pre-treatment	/						
CLL003_first treatment	/						
CLL004_pre-treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.449
CLL004_first treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.674
CLL005_pre-treatment	1	q43	237,921,600	238,350,737	429,137	loss	-0.837
	2	pter-p11.1	2,772	91,669,524	91,666,752	gain	0.394
	13	q14.2-q14.3	48,298,134	50,803,969	2,505,835	loss	-1.199
	18	pter-p11.21	1,543	15,349,282	15,347,739	loss	-0.473
CLL005_first treatment	1	q43	237,921,600	238,350,737	429,137	loss	-0.986
	2	pter-p11.1	2,772	91,669,524	91,666,752	gain	0.414
	13	q14.2-q14.3	48,298,134	50,803,969	2,505,835	loss	-1.302
	18	pter-p11.21	1,543	15,349,282	15,347,739	loss	-0.465
CLL006_pre-treatment	13	q14.3	49,194,906	49,862,328	667,422	loss	-0.958
CLL006_first treatment	11	q22.3-qter	107,106,130	134,449,982	27,343,852	loss	-0.200
	13	q14.3	49,194,906	49,862,328	667,422	loss	-1.134
CLL007_pre-treatment	2	pter-p11.1	2,772	91,669,524	91,666,752	gain	0.545
	6	q23.3-q24.1	135,762,978	139,629,812	3,866,834	loss	-0.750
		q25.2-q25.3	155,389,629	158,555,754	3,166,125	loss	-0.814
	13	q14.2-q14.3	48,602,737	50,805,800	2,203,063	loss	-0.741
	18	pter-p11.21	1,543	15,344,955	15,343,412	loss	-0.453
CLL007_first treatment	2	pter-p11.1	2,772	91,669,524	91,666,752	gain	0.655
	6	q23.3-q24.1	135,762,978	139,629,812	3,866,834	loss	-1.060
		q25.2-q25.3	155,389,629	158,555,754	3,166,125	loss	-1.141
	13	q14.2-q14.3	48,602,737	50,805,800	2,203,063	loss	-1.060
	18	pter-p11.21	1,543	15,344,955	15,343,412	loss	-0.854
CLL008_pre-treatment	/						
CLL008_first treatment	/						
CLL009_pre-treatment	11	q22.3-q23.3	102,440,047	115,759,135	13,319,088	loss	-0.701
	13	q14.11-q21.33	40,410,699	67,857,615	27,446,916	loss	-0.378
CLL009_first treatment	11	q22.3-q23.3	102,440,047	115,759,135	13,319,088	loss	-1.140
	13	q14.11-q21.33	40,410,699	67,857,615	27,446,916	loss	-0.649
CLL010_pre-treatment	6	q21	106,651,253	109,958,630	3,307,377	loss	-0.843
	13	q14.13-q14.2	46,186,341	47,128,170	941,829	loss	-0.789
	13	q14.2-q14.3	48,075,880	51,239,182	3,163,302	loss	-0.738

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL010_first treatment	6	q21	106,651,253	109,958,630	3,307,377	loss	-1.089
	13	q14.13-q14.2	46,186,341	47,128,170	941,829	loss	-1.045
		q14.2-q14.3	48,075,880	51,239,182	3,163,302	loss	-1.083
CLL011_pre-treatment	11	q14.3-q23.3	89,903,864	117,335,486	27,431,622	loss	-0.208
	13	q14.2-q14.3	47,624,061	50,735,656	3,111,595	loss	-0.389
CLL011_first treatment	2	p22.2-p22.1	37,191,614	38,946,905	1,755,291	loss	-0.409
		p21	42,802,516	46,748,828	3,946,312	loss	-0.383
	11	q14.3-q23.3	89,903,864	117,335,486	27,431,622	loss	-0.558
	13	q14.2-q14.3	47,624,061	50,735,656	3,111,595	loss	-0.637
CLL012_pre-treatment	2	pter-p11.1	2,772	91,669,524	91,666,752	gain	0.521
	13	q14.2-q21.1	47,909,686	54,506,513	6,596,827	loss	-0.187
	20	pter-p11.1	9,293	26,253,567	26,244,274	loss	-0.658
	23	pter-qter	108,465	154,907,376	154,798,911	loss	-0.968
CLL012_first treatment	2	pter-p11.1	2,772	91,669,524	91,666,752	gain	0.690
	13	q14.2-q21.1	47,909,686	54,506,513	6,596,827	loss	-0.237
	20	pter-p11.1	9,293	26,253,567	26,244,274	loss	-1.102
	23	pter-qter	108,465	154,907,376	154,798,911	loss	-0.968
CLL013_pre-treatment	13	q14.3	49,503,795	50,292,826	789,031	loss	-0.401
CLL013_first treatment	2	q24.3-q31.1	167,124,684	170,891,195	3,766,511	loss	-0.833
		q31.2-q31.3	178,272,541	180,648,285	2,375,744	loss	-0.848
		q31.3-q32.1	182,257,505	183,959,860	1,702,355	loss	-0.813
		q33.3-q34	208,884,589	210,984,140	2,099,551	loss	-0.851
	5	p15.32-p15.31	5,448,826	6,695,426	1,246,600	loss	-0.902
		q22.2-q22.3	113,020,008	113,424,277	404,269	loss	-0.816
		q22.3	113,699,667	113,743,974	44,307	loss	-0.822
		q22.3-q23.1	114,158,360	116,586,372	2,428,012	loss	-0.866
		q23.1-q23.3	120,729,374	127,600,968	6,871,594	loss	-0.860
	9	q31.2-q31.3	107,344,321	111,576,250	4,231,929	loss	-0.890
	11	q13.5-q14.1	76,554,922	77,510,511	955,589	loss	-0.945
		q14.1	80,904,528	84,177,562	3,273,034	loss	-0.856
		q22.3-q23.3	105,914,199	117,557,981	11,643,782	loss	-0.851
	13	q14.12-q21.33	44,594,072	69,758,769	25,164,697	loss	-0.904
CLL014_pre-treatment	13	q14.3	49,459,406	50,557,748	1,098,342	loss	-0.531
CLL014_first treatment	13	q14.3	49,459,406	50,557,748	1,098,342	loss	-0.710
CLL015_pre-treatment	/						
CLL015_first treatment	/						
CLL016_pre-treatment	13	q14.2-q14.3	47,884,307	51,722,294	3,837,987	loss	-0.892
		q14.2	49,492,402	50,076,715	584,313	loss	-2.746
	15	q15.1	38,192,659	38,591,866	399,207	loss	-0.670
CLL016_first treatment	13	q14.2-q14.3	47,884,307	51,722,294	3,837,987	loss	-1.155
		q14.2	49,492,402	50,076,715	584,313	loss	-4.060
	15	q15.1	38,192,659	38,591,866	399,207	loss	-0.965
CLL017_pre-treatment	2	pter-p14	2,772	64,576,971	64,574,199	gain	0.311
	11	q21-q23.3	93,116,414	116,589,589	23,473,175	loss	-0.919
	13	q14.2-q14.3	47,731,755	50,432,175	2,700,420	loss	-0.870
CLL017_first treatment	2	pter-p14	2,772	64,576,971	64,574,199	gain	0.450
	11	q21-q23.3	93,116,414	116,589,589	23,473,175	loss	-1.044
	13	q14.2-q14.3	47,731,755	50,432,175	2,700,420	loss	-1.107

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL018_pre-treatment	11	q22.3	107,595,005	107,673,512	78,507	loss	-0.968
	13	q14.2-q14.3	48,703,750	50,798,935	2,095,185	loss	-0.964
CLL018_first-treatment	11	q22.3	107,595,005	107,673,512	78,507	loss	-1.073
	13	q14.2-q14.3	48,703,750	50,798,935	2,095,185	loss	-1.032
CLL018_post treatment	4	q35.1	184,986,264	186,628,021	1,641,757	loss	-0.960
	8	q11.23	54,781,951	55,403,044	621,093	loss	-0.911
		q12.1-q12.3	59,482,605	62,600,010	3,117,405	loss	-0.944
	11	q22.3	107,595,005	107,673,512	78,507	loss	-1.176
	13	q12.3	29,494,429	30,563,278	1,068,849	loss	-0.980
		q14.11-q14.12	43,377,000	44,303,421	926,421	loss	-0.890
q14.2-q14.3		48,370,486	52,055,307	3,684,821	loss	-1.061	
CLL019_pre-treatment	/						
CLL019_first treatment	/						
CLL019_post treatment	/						
CLL020_pre-treatment	13	q14.3	49,448,082	50,422,445	974,363	loss	-0.516
CLL020_first treatment	13	q14.3	49,448,082	50,422,445	974,363	loss	-1.211
CLL020_post treatment	13	q14.3	49,448,082	50,422,445	974,363	loss	-1.402
CLL021_pre-treatment	11	q22.1-q23.2	97,149,969	113,906,162	16,756,193	loss	-0.765
	13	q14.12-q31.1	45,074,613	77,994,851	32,920,238	loss	-0.539
CLL021_first treatment	11	q22.1-q23.2	97,149,969	113,906,162	16,756,193	loss	-0.998
	13	q14.12-q31.1	45,074,613	77,994,851	32,920,238	loss	-0.851
CLL021_post treatment	11	q22.1-q23.2	97,149,969	113,906,162	16,756,193	loss	-0.957
	13	q14.12-q31.1	45,074,613	77,994,851	32,920,238	loss	-0.791
CLL022_pre-treatment	2	pter-p13.1	2,772	75,006,008	75,003,236	gain	0.275
	17	pter-p12	514	14,770,640	14,770,126	loss	-0.846
	20	pter-p11.1	9,293	26,253,567	26,244,274	loss	-0.866
CLL022_first treatment	2	pter-p13.1	2,772	75,006,008	75,003,236	gain	0.374
	17	pter-p12	514	14,770,640	14,770,126	loss	-1.035
	20	pter-p11.1	9,293	26,253,567	26,244,274	loss	-1.028
CLL022_post treatment	2	pter-p13.1	2,772	75,006,008	75,003,236	gain	0.273
	6	q14.2-q22.31	84,597,781	122,882,024	38,284,243	loss	-0.205
	15	q15.1-q15.2	39,347,452	40,762,345	1,414,893	loss	-0.370
	17	pter-p11.2	514	19,641,940	19,641,426	loss	-0.561
	18	q12.3-q21.2	38,228,591	46,836,322	8,607,731	loss	-0.325
		q21.33-q22.1	58,240,849	61,387,498	3,146,649	gain	0.344
		q22.1-q22.2	64,246,823	66,423,049	2,176,226	loss	-0.268
		q22.3-q23	68,282,684	74,708,523	6,425,839	gain	0.465
	20	q23	75,323,271	75,929,588	606,317	loss	-0.474
		pter-p11.1	9,293	26,253,567	26,244,274	loss	-0.611
q11.1-q11.23		28,034,001	34,789,022	6,755,021	gain	0.483	
q11.23	35,155,757	36,893,876	1,738,119	loss	-0.397		
CLL023_pre-treatment	6	q16.1-q24.3	98,606,328	147,706,364	49,100,036	loss	-0.858
CLL023_first treatment	6	q16.1-q24.3	98,606,328	147,706,364	49,100,036	loss	-0.924
CLL023_post treatment	1	p31.3-p31.1	65,599,504	70,346,813	4,747,309	loss	-0.201
		p22.1-p21.2	94,432,914	99,934,869	5,501,955	loss	-0.202
		q24.1	165,835,065	168,271,346	2,436,281	loss	-0.206
	5	q23.2-q23.3	126,240,356	129,454,317	3,213,961	loss	-0.206
		q31.2-q31.3	138,990,701	140,075,659	1,084,958	loss	-0.276

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL023_post treatment	5	q32-q33.1	146,109,319	149,427,821	3,318,502	loss	-0.219
		q34	160,291,039	163,845,473	3,554,434	loss	-0.206
	6	q16.1-q24.3	98,606,328	147,706,364	49,100,036	loss	-0.906
		17	pter-p11.2	514	21,459,693	21,459,179	loss
	p11.2-qter		21,464,753	83,039,576	61,574,823	gain	0.677
CLL024_pre-treatment	2	p21-p16.3	42,506,338	48,582,437	6,076,099	loss	-0.220
		q11.2	96,099,907	100,948,166	4,848,259	loss	-0.230
		q13	111,159,726	112,194,596	1,034,870	loss	-0.253
		q13-q14.1	113,366,647	115,093,496	1,726,849	loss	-0.217
		q21.3-q22.1	135,157,628	136,837,001	1,679,373	loss	-0.235
		q31.1	171,514,116	172,077,646	563,530	loss	-0.211
	6	q33.1-q33.2	201,421,699	204,439,764	3,018,065	loss	-0.232
		q16.3	99,940,646	100,655,509	714,863	loss	-0.203
		q21	107,019,802	111,427,533	4,407,731	loss	-0.212
		q22.1-q22.2	116,738,405	117,120,247	381,842	loss	-0.200
		q22.31-q22.32	126,188,635	126,494,744	306,109	loss	-0.204
	11	q25.2-q25.3	154,970,578	159,602,252	4,631,674	loss	-0.213
		q13.5-q23.3	76,242,150	116,833,299	40,591,149	loss	-0.259
	13	q14.11-q14.2	40,484,054	48,085,207	7,601,153	loss	-0.749
		q14.3	49,402,802	50,221,488	818,686	loss	-0.755
	14	q23.2-q24.3	62,817,387	74,554,926	11,737,539	loss	-0.200
CLL024_first treatment	2	p21-p16.3	42,506,338	48,582,437	6,076,099	loss	-0.290
		q11.2	96,099,907	100,948,166	4,848,259	loss	-0.330
		q13	111,159,726	112,194,596	1,034,870	loss	-0.278
		q13-q14.1	113,366,647	115,093,496	1,726,849	loss	-0.317
		q21.3-q22.1	135,157,628	136,837,001	1,679,373	loss	-0.328
		q31.1	171,514,116	172,077,646	563,530	loss	-0.411
	6	q33.1-q33.2	201,421,699	204,439,764	3,018,065	loss	-0.353
		q16.3	99,940,646	100,655,509	714,863	loss	-0.399
		q21	107,019,802	111,427,533	4,407,731	loss	-0.366
		q22.1-q22.2	116,738,405	117,120,247	381,842	loss	-0.317
		q22.31-q22.32	126,188,635	126,494,744	306,109	loss	-0.261
	11	q25.2-q25.3	154,970,578	159,602,252	4,631,674	loss	-0.268
		q13.5-q23.3	76,242,150	116,833,299	40,591,149	loss	-0.463
	13	q14.11-q14.2	40,484,054	48,085,207	7,601,153	loss	-1.060
		q14.3	49,402,802	50,221,488	818,686	loss	-0.995
	14	q23.2-q24.3	62,817,387	74,554,926	11,737,539	loss	-0.364
CLL024_post treatment	2	p21-p16.3	42,506,338	48,582,437	6,076,099	loss	-0.378
		q11.2	96,099,907	100,948,166	4,848,259	loss	-0.389
		q13	111,159,726	112,194,596	1,034,870	loss	-0.392
		q13-q14.1	113,366,647	115,093,496	1,726,849	loss	-0.375
		q21.3-q22.1	135,157,628	136,837,001	1,679,373	loss	-0.384
		q31.1	171,514,116	172,077,646	563,530	loss	-0.374
	6	q33.1-q33.2	201,421,699	204,439,764	3,018,065	loss	-0.334
		q16.3	99,940,646	100,655,509	714,863	loss	-0.337
		q21	107,019,802	111,427,533	4,407,731	loss	-0.357
		q22.1-q22.2	116,738,405	117,120,247	381,842	loss	-0.333
		q22.31-q22.32	126,188,635	126,494,744	306,109	loss	-0.462
		q25.2-q25.3	154,970,578	159,602,252	4,631,674	loss	-0.363

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL024_post treatment	11	q13.5-q23.3	76,242,150	116,833,299	40,591,149	loss	-0.435
	13	q14.11-q14.2	40,484,054	48,085,207	7,601,153	loss	-0.969
		q14.3	49,402,802	50,221,488	818,686	loss	-1.029
	14	q23.2-q24.3	62,817,387	74,554,926	11,737,539	loss	-0.391
CLL025_pre-treatment	/						
CLL025_first treatment	11	q22.2-q23.3	101,742,930	117,358,823	15,615,893	loss	-0.272
CLL025_post treatment	1	p32.1	58,970,739	59,719,908	749,169	loss	-0.291
		p31.3	66,193,246	66,625,424	432,178	loss	-0.364
		p31.3	67,830,804	68,015,985	185,181	loss	-0.467
		p21.2	101,158,767	101,617,094	458,327	loss	-0.320
	4	q35.1	185,234,241	185,965,246	731,005	loss	-0.329
	11	q22.2-q23.3	101,742,930	117,358,823	15,615,893	loss	-0.388
	13	q14.3	49,418,137	50,336,803	918,666	loss	-0.287
CLL026_pre-treatment	2	p16.1-p14	59,872,879	65,054,127	5,181,248	gain	0.781
	11	q22.1-q25	98,736,516	131,952,204	33,215,688	loss	-0.578
	13	q14.2-q21.2	46,297,419	57,660,246	11,362,827	loss	-0.496
CLL026_first treatment	2	p16.1-p14	59,872,879	65,054,127	5,181,248	gain	0.526
	11	q21-q25	95,944,605	131,952,204	36,007,599	loss	-0.602
		q22.1-q23.2	98,736,516	114,423,576	15,687,060	loss	-1.219
	13	q14.12-q21.2	45,510,837	57,660,246	12,149,409	loss	-0.553
		q14.2-q14.3	46,297,419	51,639,572	5,342,153	loss	-1.161
CLL026_post treatment	11	q21-q23.2	95,944,605	114,423,576	18,478,971	loss	-0.497
	13	q14.12-q14.3	45,510,837	51,639,572	6,128,735	loss	-0.711
CLL027_pre-treatment	17	pter-p11.2	514	19,685,972	19,685,458	loss	-0.187
		q11.1	22,367,498	23,188,621	821,123	loss	-0.179
CLL027_first treatment	17	pter-p11.2	514	19,685,972	19,685,458	loss	-0.225
		q11.1	22,367,498	23,188,621	821,123	loss	-0.208
CLL027_post treatment	17	pter-p11.2	514	19,685,972	19,685,458	loss	-1.212
		q11.1	22,367,498	23,188,621	821,123	loss	-1.017
	23	p22.33-p21.1	2,642,482	32,166,406	29,523,924	gain	1.841
CLL028_first treatment	11	q14.2-q23.3	85,717,189	117,447,057	31,729,868	loss	-0.425
		q22.1-q23.2	98,182,183	114,949,627	16,767,444	loss	-0.929
	21	p11.2-q22.3	9,758,730	46,921,373	37,162,643	gain	0.283
CLL028_post treatment	11	q14.2-q23.3	85,717,189	117,447,057	31,729,868	loss	-0.942
	13	q14.12-q22.1	45,288,077	72,929,178	27,641,101	loss	-0.717
CLL029_first treatment	13	q14.11-q22.2	42,277,674	75,616,878	33,339,204	loss	-0.507
		q14.3	49,512,600	50,652,950	1,140,350	loss	-1.069
	14	q24.3	75,152,557	75,614,215	461,658	loss	-0.508
	20	q11.23	34,442,753	35,063,639	620,886	loss	-0.422
CLL029_post treatment	13	q14.11-q22.2	42,277,674	75,616,878	33,339,204	loss	-0.991
	14	q24.3	75,152,557	75,614,215	461,658	loss	-0.905
	20	q11.23	34,442,753	35,063,639	620,886	loss	-0.422
CLL030_first treatment	13	q14.2-q14.3	48,649,465	50,708,954	2,059,489	loss	-0.993
	13	q14.3	49,458,298	50,378,108	919,810	loss	-2.600
CLL030_post treatment	13	q14.2-q14.3	48,649,465	50,708,954	2,059,489	loss	-0.708
		q14.3	49,458,298	50,378,108	919,810	loss	-2.127
	17	pter-p11.2	514	21,459,693	21,459,179	loss	-0.660
	20	p11.21	22,324,280	24,395,367	2,071,087	loss	-0.380
q11.21-q11.22		29,339,493	32,302,369	2,962,876	loss	-0.328	

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL030_post treatment	20	q11.23-q13.12	35,233,455	43,928,462	8,695,007	loss	-0.382
CLL031_first treatment	13	q14.12-q31.2	45,820,540	88,245,320	42,424,780	loss	-0.849
	17	pter-p11.1	514	22,159,777	22,159,263	loss	-0.792
CLL031_post treatment	20	pter-p11.1	9,293	26,125,093	26,115,800	loss	-0.447
	13	q14.12-q31.2	45,820,540	88,245,320	42,424,780	loss	-0.674
	17	pter-p11.1	514	22,159,777	22,159,263	loss	-0.605
CLL032_first treatment	20	pter-p11.1	9,293	26,125,093	26,115,800	loss	-0.359
	11	q14.1-q23.3	77,298,348	115,713,523	38,415,175	loss	-0.724
CLL032_post treatment	11	q14.1-q23.3	77,298,348	115,713,523	38,415,175	loss	-0.583
	13	q13.3-q14.3	36,882,149	51,268,511	14,386,362	loss	-0.413
CLL033_first treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.562
CLL033_post treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.601
CLL034_first treatment	/						
CLL034_post treatment	/						
CLL035_first treatment	17	p13.3-p11.1	514	22,159,777	22,159,263	loss	-0.200
CLL035_post treatment	6	p25.2-p25.1	3,633,985	6,361,078	2,727,093	loss	-0.433
		p24.3-p22.3	10,339,898	16,922,244	6,582,346	loss	-0.416
		p22.3-p22.1	20,921,354	26,813,566	5,892,212	loss	-0.377
		p21.31-p21.1	36,455,686	41,480,026	5,024,340	loss	-0.340
		p21.1-p12.3	42,192,494	49,960,509	7,768,015	loss	-0.437
		p12.1	53,719,699	54,362,058	642,359	loss	-0.333
	8	pter-q11.21	21,242	50,018,661	49,997,419	loss	-0.396
	17	pter-p11.1	514	22,159,777	22,159,263	loss	-0.910
CLL036_first treatment	13	q14.3	49,380,179	50,519,784	1,139,605	loss	-0.862
CLL036_post treatment	13	q14.3	49,380,179	50,519,784	1,139,605	loss	-1.007
CLL037_first treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.575
CLL037_post treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.692
CLL038_first treatment	13	q14.3-q31.1	49,164,110	86,304,325	37,140,215	loss	-0.834
		q14.3	49,482,488	50,345,355	862,867	loss	-2.463
	17	q22	51,849,635	54,007,438	2,157,803	loss	-0.659
CLL038_post treatment	13	q14.3-q31.1	49,164,110	86,304,325	37,140,215	loss	-1.098
		q14.3	49,482,488	50,345,355	862,867	loss	-3.483
	17	q22	51,849,635	54,007,438	2,157,803	loss	-0.929
CLL039_first treatment	13	q14.3	49,463,867	50,389,963	926,096	loss	-0.695
CLL039_post treatment	2	pter-p14	2,772	66,126,744	66,123,972	gain	0.343
	11	q14.1-q23.2	81,403,681	115,019,412	33,615,731	loss	-0.239
	13	q14.3	49,463,867	50,389,963	926,096	loss	-0.298
CLL040_first treatment	11	q22.1-q24.1	99,823,384	121,040,148	21,216,764	loss	-0.319
	13	q14.3	49,459,406	50,539,162	1,079,756	loss	-0.832
	16	p11.2-q21	33,283,373	57,035,890	23,752,517	loss	-0.551
	17	pter-p11.2	514	19,092,779	19,092,265	loss	-0.574
CLL040_post treatment	5	p15.33	68,520	1,903,001	1,834,481	gain	0.408
		p15.2	8,794,893	9,213,497	418,604	gain	0.493
	10	p12.1-p11.22	26,036,002	33,817,413	7,781,411	loss	-0.605
		p11.21-q21.2	34,563,897	63,258,313	28,694,416	loss	-0.587
		q22.3-q23.1	81,684,333	86,496,284	4,811,951	loss	-0.594
		q23.2-q25.3	89,545,776	118,121,011	28,575,235	loss	-0.591
	q26.11-q26.13	120,622,800	123,120,748	2,497,948	loss	-0.557	

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL040_post treatment	11	q22.1-q24.1	99,823,384	121,040,148	21,216,764	loss	-0.299
	13	q14.3	49,459,406	50,539,162	1,079,756	loss	-0.963
	16	p11.2-q21	33,283,373	57,035,890	23,752,517	loss	-0.881
	17	pter-p11.2	514	19,092,779	19,092,265	loss	-0.903
	18	pter-p11.22	1,543	10,116,963	10,115,420	loss	-0.621
		p11.22	10,269,399	10,557,346	287,947	loss	-0.625
		q12.3	39,041,193	40,091,974	1,050,781	loss	-0.568
		q22.1	62,745,560	63,837,762	1,092,202	loss	-0.626
CLL041_first treatment	13	q14.2-q14.3	48,349,864	50,589,398	2,239,534	loss	-1.013
CLL041_post treatment	13	q14.2-q14.3	48,349,864	50,589,398	2,239,534	loss	-0.878
CLL042_first treatment	13	q14.3	49,389,952	50,598,450	1,208,498	loss	-1.047
CLL042_post treatment	13	q14.3	49,389,952	50,598,450	1,208,498	loss	-0.593
CLL043_first treatment	/						
CLL043_post treatment	13	q14.2-q14.3	47,365,868	50,556,183	3,190,315	loss	-0.269
CLL044_first treatment	11	q22.1-q23.2	100,955,074	114,329,187	13,374,113	loss	-0.451
	13	q14.11-q21.1	41,278,446	54,400,376	13,121,930	loss	-0.887
CLL044_post treatment	2	pter-p15	2,772	62,465,549	62,462,777	gain	0.355
	11	q14.1-q23.2	78,233,914	114,862,582	36,628,668	loss	-0.569
	13	q14.11-q21.1	41,278,446	54,400,376	13,121,930	loss	-0.649
	17	pter-p13.1	514	7,724,874	7,724,360	loss	-0.325
CLL045_first treatment	4	p16.3-p15.2	2,819,825	26,607,609	23,787,784	loss	-0.861
CLL045_post treatment	4	p16.3-p15.2	2,819,825	26,607,609	23,787,784	loss	-0.533
CLL046_first treatment	/						
CLL046_post treatment	/						
CLL047_first treatment	11	q22.3-q23.3	102,676,275	118,022,794	15,346,519	loss	-0.200
CLL047_post treatment	9	p21.3	21,854,535	22,240,574	386,039	loss	-2.783
CLL048_first treatment	13	q14.2-q14.3	46,763,020	51,766,291	5,003,271	loss	-0.735
CLL048_post treatment	11	q21-q24.2	94,541,819	124,492,143	29,950,324	loss	-0.505
	13	q14.2-q14.3	46,763,020	51,766,291	5,003,271	loss	-1.083
CLL049_first treatment	11	q13.5-q24.1	75,936,944	122,552,113	46,615,169	loss	-0.605
	13	q14.2-q14.3	48,475,768	50,846,078	2,370,310	loss	-0.811
CLL049_post treatment	11	q13.5-q24.1	75,936,944	122,552,113	46,615,169	loss	-0.747
	13	q14.2-q14.3	48,475,768	50,846,078	2,370,310	loss	-0.776
CLL050_first treatment	6	p21.31-p21.2	35,944,040	36,831,550	887,510	loss	-0.627
	11	q22.1-q23.2	99,367,917	113,786,697	14,418,780	loss	-0.345
	13	q14.3	49,332,419	50,475,702	1,143,283	loss	-0.483
CLL050_post treatment	6	p21.31-p21.2	35,944,040	36,831,550	887,510	loss	-0.614
	11	q22.1-q23.2	99,367,917	113,786,697	14,418,780	loss	-0.558
	13	q14.3	49,332,419	50,475,702	1,143,283	loss	-0.937
CLL051_first treatment	/						
CLL051_post treatment	/						
CLL052_first treatment	/						
CLL052_post treatment	/						
CLL053_first treatment	13	q14.3	48,987,845	50,735,669	1,747,824	loss	-0.292
CLL053_post treatment	13	q14.3	48,987,845	50,735,669	1,747,824	loss	-0.615
CLL054_first treatment	11	q22.1-q23.2	96,738,328	115,032,978	18,294,650	loss	-1.094
	13	q14.2-q14.3	48,860,827	50,737,417	1,876,590	loss	-0.179
CLL054_post treatment	11	q22.1-q23.2	96,738,328	115,032,978	18,294,650	loss	-0.422

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL054_post treatment	17	pter-q11.2	514	27,179,125	27,178,611	loss	-0.358
		q21.33-q22	46,930,777	51,547,522	4,616,745	loss	-0.423
	18	q12.3-q21.2	35,834,118	46,959,358	11,125,240	loss	-0.405
		q21.33-q22.3	59,213,735	67,586,049	8,372,314	loss	-0.453
		q23-qter	74,763,804	76,116,029	1,352,225	loss	-0.425
CLL055_first treatment	9	q22.31-q22.33	94,564,580	100,662,573	6,097,993	loss	-1.041
	11	q22.3-q23.3	107,407,997	116,209,813	8,801,816	loss	-1.030
	13	q11-q12.12	17,924,937	23,078,358	5,153,421	loss	-1.034
		q13.2-q13.3	34,245,835	39,115,091	4,869,256	loss	-0.974
		q14.2-q14.3	47,080,027	50,001,462	2,921,435	loss	-0.983
	15	q14-q15.1	32,451,387	39,315,978	6,864,591	loss	-0.985
		q21.2.q21.3	50,042,147	54,732,740	4,690,593	loss	-0.973
		q25.3-q26.1	83,956,291	87,312,981	3,356,690	loss	-1.012
	18	q11.2-q12.1	22,410,136	26,153,938	3,743,802	loss	-0.968
		q12.2-q12.3	32,367,728	37,920,913	5,553,185	loss	-0.977
	q22.1-qter	60,707,441	76,116,029	15,408,588	loss	-1.001	
CLL055_post treatment	9	q22.31-q22.33	94,564,580	100,662,573	6,097,993	loss	-0.623
	11	q22.3-q23.3	107,407,997	116,209,813	8,801,816	loss	-0.728
	13	q11-q12.12	17,924,937	23,078,358	5,153,421	loss	-0.659
		q13.2-q13.3	34,245,835	39,115,091	4,869,256	loss	-0.737
		q14.2-q14.3	47,080,027	50,001,462	2,921,435	loss	-0.724
	15	q14-q15.1	32,451,387	39,315,978	6,864,591	loss	-0.717
		q21.2.q21.3	50,042,147	54,732,740	4,690,593	loss	-0.698
		q25.3-q26.1	83,956,291	87,312,981	3,356,690	loss	-0.695
	18	q11.2-q12.1	22,410,136	26,153,938	3,743,802	loss	-0.761
		q12.2-q12.3	32,367,728	37,920,913	5,553,185	loss	-0.727
	q22.1-qter	60,707,441	76,116,029	15,408,588	loss	-0.738	
CLL056_first treatment	11	q21-q24.1	94,490,357	122,129,736	27,639,379	loss	-0.450
	13	q13.3-q14.3	35,169,197	51,594,991	16,425,794	loss	-1.041
CLL056_post treatment	11	q21-q24.1	94,490,357	122,129,736	27,639,379	loss	-0.588
	13	q13.3-q14.3	35,169,197	51,594,991	16,425,794	loss	-0.569
CLL057_first treatment	5	q11.2	56,675,036	56,982,898	307,862	loss	-0.953
	11	q22.1-q24.2	99,670,541	124,314,912	24,644,371	loss	-1.166
	13	q14.2-q14.3	48,801,335	50,571,406	1,770,071	loss	-1.254
CLL057_post treatment	5	q11.2	56,675,036	56,982,898	307,862	loss	-0.535
	11	q22.1-q24.2	99,670,541	124,314,912	24,644,371	loss	-0.515
	13	q14.2-q14.3	48,801,335	50,571,406	1,770,071	loss	-0.586
CLL058_first treatment	2	pter-p12	2,772	77,730,205	77,727,433	gain	0.526
	4	pter-p15.1	61,420	33,182,352	33,120,932	loss	-1.023
	7	q31.1-qter	112,784,246	158,819,753	46,035,507	gain	0.732
	11	q22.1-q23.3	98,135,404	117,834,754	19,699,350	loss	-0.811
CLL058_post treatment	2	pter-p12	2,772	77,730,205	77,727,433	gain	0.203
	4	pter-p15.1	61,420	33,182,352	33,120,932	loss	-0.512
	7	q31.1-qter	112,784,246	158,819,753	46,035,507	gain	0.359
	11	q22.1-q23.3	98,135,404	117,834,754	19,699,350	loss	-0.364
CLL059_first treatment	6	q14.1-q22.32	82,423,220	126,819,982	44,396,762	loss	-0.341
	11	q22.3-q24.1	105,740,221	122,854,886	17,114,665	loss	-1.058
CLL059_post treatment	6	q14.1-q22.32	82,423,220	126,819,982	44,396,762	loss	-0.212
	11	q22.3-q24.1	105,740,221	122,854,886	17,114,665	loss	-0.519

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL060_first treatment	/						
CLL060_post treatment	/						
CLL061_first treatment	/						
CLL061_post treatment	10	p12.31-p12.2	22,731,302	23,268,210	536,908	loss	-0.574
		q23.33-q26.13	97,574,534	126,794,121	29,219,587	loss	-0.456
CLL062_first treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.675
CLL062_post treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.718
CLL063_first treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.687
CLL063_post treatment	2	p16.1-p15	58,663,874	61,886,833	3,222,959	gain	0.477
	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.483
	17	pter-q11.1	514	22,387,513	22,386,999	loss	-0.487
CLL064_first treatment	2	pter-p14	2,772	68,005,138	68,002,366	gain	0.437
	13	q14.3	49,418,137	50,544,950	1,126,813	loss	-0.781
	18	q22.1-qter	63,110,340	76,116,029	13,005,689	loss	-0.433
CLL064_post treatment	2	pter-p14	2,772	68,005,138	68,002,366	gain	0.533
	13	q14.3	49,418,137	50,544,950	1,126,813	loss	-0.657
	18	q22.1-qter	63,110,340	76,116,029	13,005,689	loss	-0.196
CLL065_first treatment	/						
CLL065_post treatment	/						
CLL066_first treatment	13	q14.12-q14.3	45,785,594	50,574,663	4,789,069	loss	-0.562
CLL066_post treatment	13	q14.12-q14.3	45,785,594	50,574,663	4,789,069	loss	-0.966
CLL067_first treatment	8	pter-p21.3	21,242	23,056,820	23,035,578	loss	-0.638
		q22.1-qter	95,913,614	146,268,947	50,355,333	gain	0.548
	11	q15.3-q23.3	76,605,673	115,877,785	39,272,112	loss	-0.892
	13	q14.3	49,371,563	50,666,777	1,295,214	loss	-0.945
CLL067_post treatment	8	pter-p21.3	21,242	23,056,820	23,035,578	loss	-0.918
		q22.1-qter	95,913,614	146,268,947	50,355,333	gain	0.735
	11	q15.3-q23.3	76,605,673	115,877,785	39,272,112	loss	-1.007
	13	q14.3	49,371,563	50,666,777	1,295,214	loss	-0.916
	19	pter-qter	41,898	63,789,654	63,747,756	gain	0.276
CLL068_first treatment	11	q14.1-q25	84,772,249	131,749,079	46,976,830	loss	-1.089
	13	q14.3	49,515,159	49,952,914	437,755	loss	-1.088
CLL068_post treatment	1	q44	246,365,116	247,190,999	825,883	gain	0.541
	3	pter-p21.31	35,333	49,757,823	49,722,490	loss	-0.565
	3	p14.1-q11.2	71,448,061	99,487,072	28,039,011	loss	-0.636
		q12.3-q13.23	104,263,343	119,970,926	15,707,583	loss	-0.557
	4	pter-q12	58,809	55,394,118	55,335,309	loss	-0.653
	6	pter-p24.1	94,649	11,616,840	11,522,191	gain	1.036
	11	q22.1-q23.2	98,871,552	114,443,022	15,571,470	loss	-0.699
		q23.3-q24.1	118,532,755	121,151,673	2,618,918	loss	-0.670
	11	q25	132,556,301	134,449,982	1,893,681	loss	-0.620
	13	q14.2-q31.1	47,206,915	77,876,017	30,669,102	loss	-0.657
		q31.1	80,058,911	84,339,307	4,280,396	loss	-0.673
		q31.3	90,823,104	91,066,296	243,192	loss	-0.651
		q31.3-q32.1	91,762,283	96,252,811	4,490,528	loss	-0.651
	15	q26.2-q26.3	93,362,859	100,286,551	6,923,692	loss	-0.624
	17	pter-p11.2	514	19,034,166	19,033,652	loss	-0.622
p11.2		19,070,812	19,771,991	701,179	gain	0.578	

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL068_post treatment	17	p11.2-p11.1	20,988,007	22,143,683	1,155,676	loss	-0.551
	23	p22.33	108,465	2,703,624	2,595,159	gain	0.486
		q28	154,596,513	154,843,251	246,738	loss	-0.969
	24	pter-p11.1	169,542	11,244,519	11,074,977	gain	0.850
		q11.222-q12	20,585,200	27,209,311	6,624,111	loss	-1.076
CLL069_first treatment	11	q12.2-q13.1	60,213,475	63,748,377	3,534,902	loss	-1.063
		q13.5-q23.3	76,186,933	117,469,700	41,282,767	loss	-0.982
		q23.3-q24.1	120,284,569	122,491,536	2,206,967	loss	-1.108
		q24.1	122,545,918	122,900,680	354,762	loss	-1.133
	13	q13.3-q21.2	36,628,508	60,160,245	23,531,737	loss	-0.999
CLL069_post treatment	11	q12.2-q13.1	60,213,475	63,748,377	3,534,902	loss	-1.024
		q13.5-q23.3	76,186,933	117,469,700	41,282,767	loss	-0.989
		q23.3-q24.1	120,284,569	122,491,536	2,206,967	loss	-1.065
		q24.1	122,545,918	122,900,680	354,762	loss	-1.025
	13	q13.3-q21.2	36,628,508	60,160,245	23,531,737	loss	-0.987
CLL070_first treatment	13	q14.2-q14.3	48,745,013	51,287,744	2,542,731	loss	-0.479
CLL070_post treatment	13	q14.2-q14.3	48,745,013	51,286,766	2,541,753	loss	-0.376
	17	pter-p11.2	514	20,549,240	20,548,726	loss	-0.320
CLL071_first treatment	6	p21.31-p21.2	35,162,163	37,777,468	2,615,305	loss	-1.034
	13	q14.2-q14.3	48,822,516	50,648,626	1,826,110	loss	-0.976
	15	q15.1	38,527,153	40,003,310	1,476,157	loss	-0.907
CLL071_post treatment	6	p21.31-p21.2	35,162,163	37,777,468	2,602,109	loss	-0.915
	13	q14.2-q14.3	48,822,516	50,648,626	1,826,110	loss	-0.934
	15	q15.1	38,527,153	40,003,310	1,478,071	loss	-0.792
CLL072_first treatment	13	q14.3	49,194,906	50,429,664	1,234,758	loss	-0.935
CLL072_post treatment	13	q14.3	49,194,906	50,429,664	1,234,758	loss	-0.860
CLL073_first treatment	11	q22.2-q23.3	101,742,945	116,483,967	14,741,022	loss	-0.382
	13	q14.11-q14.3	39,782,043	50,737,417	10,955,374	loss	-0.277
CLL073_post treatment	4	pter-q22.2	2,269	94,600,888	94,598,619	loss	-0.296
	6	q16.3-q21	101,902,099	112,474,603	10,572,504	loss	-0.371
		q22.1	116,543,892	117,051,238	507,346	loss	-0.746
		q22.31	118,662,492	119,568,865	906,373	loss	-0.798
		q22.31	119,813,145	119,956,690	143,545	loss	-0.533
		q22.31	120,255,625	120,739,870	484,245	loss	-0.762
		q24.2	144,853,764	145,284,493	430,729	loss	-0.798
		q25.2-q25.3	155,196,611	156,955,441	1,758,830	loss	-0.787
		q25.3	157,229,724	157,385,311	155,587	loss	-0.843
	q25.3	157,978,533	159,322,914	1,344,381	loss	-0.815	
	8	p22-q11.22	17,845,248	50,900,750	33,055,502	loss	-0.403
		q12.2	61,775,605	62,024,900	249,295	loss	-0.866
		q13.2-q13.3	70,241,591	73,352,788	3,111,197	loss	-0.356
		q21.11	75,919,434	78,314,050	2,394,616	loss	-0.779
		q21.13	81,329,964	81,634,113	304,149	loss	-0.890
		q24.22	133,233,182	133,932,169	698,987	loss	-0.768
	q24.22	134,107,093	135,555,510	1,448,417	loss	-0.799	
	11	q22.2-q23.3	101,742,945	116,483,967	14,741,022	loss	-1.060
	13	q14.12-q14.2	45,547,349	48,797,357	3,250,008	loss	-1.003
q14.3		49,259,211	51,108,269	1,849,058	loss	-1.060	

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio	
CLL073_post treatment	13	q14.3	51,345,450	51,361,599	16,149	loss	-1.040	
		q14.3	98,757,773	99,056,191	298,418	loss	-0.775	
		q32.3	99,140,591	99,250,769	110,178	loss	-0.900	
		q32.3-qter	99,915,933	114,126,487	14,210,554	loss	-0.336	
	15	q11.1-q22.31	18,276,354	64,341,484	46,065,130	loss	-0.337	
		17	pter-p12	514	12,490,203	12,489,689	loss	-0.643
			p12-p11.2	12,493,589	22,046,797	9,553,208	loss	-0.279
CLL074_first treatment	10	q24.32-q24.33	103,792,359	105,374,982	1,582,623	loss	-1.161	
	13	q14.2-q14.3	48,008,662	51,499,724	3,491,062	loss	-0.236	
	16	p13.3	765	2,471,857	2,471,092	loss	-1.097	
		pter-p13.1	514	7,554,433	7,553,919	loss	-1.053	
	17	p13.1	8,340,364	8,524,173	183,809	loss	-1.041	
		p13.1-p11.2	10,823,179	17,781,639	6,958,460	loss	-1.088	
CLL074_post treatment	10	q24.32-q24.33	103,792,359	105,374,982	1,582,623	loss	-0.772	
	13	q14.2-q14.3	48,008,662	51,499,724	3,491,062	loss	-0.229	
	16	p13.3	765	2,471,857	2,471,092	loss	-0.834	
		pter-p13.1	514	7,554,433	7,553,919	loss	-0.815	
	17	p13.1	8,340,364	8,524,173	183,809	loss	-0.756	
		p13.1-p11.2	10,823,179	17,781,639	6,958,460	loss	-0.802	
CLL075_first treatment	2	p16.1-p12	59,565,607	75,819,642	16,254,035	gain	0.310	
		p16.1-p15	60,256,522	63,104,662	2,848,140	gain	0.622	
		q13	111,149,065	112,828,328	1,679,263	loss	-1.037	
		q24.3	165,284,220	166,919,690	1,635,470	loss	-0.382	
		q31.1	171,468,528	172,046,546	578,018	loss	-0.464	
		q31.1	176,248,649	176,824,870	576,221	loss	-0.426	
		q31.2	178,272,554	180,127,517	1,854,963	loss	-0.417	
		q31.3-q32.1	182,667,910	183,995,267	1,327,357	loss	-0.403	
		q32.1-q32.2	185,551,105	189,536,072	3,984,967	loss	-0.359	
		q33.1	200,288,763	201,948,900	1,660,137	loss	-0.498	
		q33.2-q33.3	204,367,612	209,066,946	4,699,334	loss	-0.422	
		q34	209,802,629	210,858,261	1,055,632	loss	-0.370	
	q36.1-q36.3	223,396,326	226,389,803	2,993,477	loss	-0.464		
	4	q21.21-q23	79,507,718	99,542,882	20,035,164	loss	-0.952	
		q35.1-q35.2	186,943,598	191,261,892	4,318,294	gain	0.412	
	8	p12-p11.21	38,162,915	40,264,829	2,101,914	loss	-0.499	
		q11.21	48,463,333	48,752,079	288,746	loss	-0.433	
		q12.1-q12.3	58,390,944	64,602,899	6,211,955	loss	-0.397	
		q13.3	70,645,032	72,011,812	1,366,780	loss	-0.410	
		q21.11-q21.12	77,954,415	80,170,682	2,216,267	loss	-0.327	
	11	pter-p15.4	188,510	6,919,741	6,731,231	loss	-0.973	
		q14.3-qter	89,023,488	134,449,982	45,426,494	loss	-0.977	
	12	q24.13	111,129,534	111,757,464	627,930	gain	0.640	
	13	q14.3	49,230,016	50,515,862	1,285,846	loss	-0.434	
	16	q23.1	76,006,164	76,929,109	922,945	loss	-1.064	
	CLL075_post treatment	2	p16.1-p15	60,256,522	63,104,662	2,848,140	gain	1.344
			q13	111,149,065	112,828,328	1,679,263	loss	-0.963
4		q21.21-q23	79,507,718	99,542,882	20,035,164	loss	-1.050	
		q35.1-q35.2	186,943,598	191,261,892	4,318,294	gain	0.564	
11		pter-p15.4	188,510	6,919,741	6,731,231	loss	-1.012	

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL075_post treatment	11	q14.3-qter	89,023,488	134,449,982	45,426,494	loss	-1.001
	12	q24.13	111,129,534	111,757,464	627,930	gain	0.694
	13	q14.3	49,230,016	50,515,862	1,285,846	loss	-0.200
	16	q23.1	76,006,164	76,929,109	922,945	loss	-1.029
CLL076_first treatment	/						
CLL076_post treatment	/						
CLL077_first treatment	3	q26.1-qter	162,008,939	199,380,503	37,371,564	gain	0.546
		p15.1-p14	6,128,739	8,895,250	2,766,511	loss	-0.871
	10	p11.23-p11.22	29,936,984	32,807,329	2,870,345	loss	-0.912
		p11.22	33,366,284	33,417,978	51,694	loss	-0.942
	13	q14.11	39,555,961	41,985,332	2,429,371	loss	-0.757
		q14.12-q14.2	45,653,853	46,362,137	708,284	loss	-0.768
		q14.2	48,300,073	50,515,862	2,215,789	loss	-0.917
		q14.2-q14.3	48,731,532	50,299,994	1,568,462	loss	-2.569
	17	p13.3	1,626,752	2,406,800	780,048	loss	-0.822
19	p12	20,390,598	20,982,513	591,915	loss	-0.675	
CLL077_post treatment	3	q26.1-qter	162,008,939	199,380,503	37,371,564	gain	0.658
		p15.1-p14	6,128,739	8,895,250	2,766,511	loss	-1.235
	10	p11.23-p11.22	29,936,984	32,807,329	2,870,345	loss	-1.123
		p11.22	33,366,284	33,417,978	51,694	loss	-1.109
	13	q14.11	39,555,961	41,985,332	2,429,371	loss	-1.127
		q14.12-q14.2	45,653,853	46,362,137	708,284	loss	-1.073
		q14.2	48,300,073	50,515,862	2,215,789	loss	-1.074
		q14.2-q14.3	48,731,532	50,299,994	1,568,462	loss	-3.555
	17	p13.3	1,626,752	2,406,800	780,048	loss	-1.177
19	p12	20,390,598	20,982,513	591,915	loss	-1.031	
CLL078_first treatment	/						
CLL078_post treatment	13	q14.11-q21.1	40,431,052	52,992,734	12,561,682	loss	-0.577
		q21.1	55,410,510	56,433,536	1,023,026	loss	-0.612
		q21.31	62,947,252	63,654,920	707,668	loss	-0.583
		q22.1	73,351,523	73,702,574	351,051	loss	-0.416
	13	q31.2	87,976,618	88,730,610	753,992	loss	-0.435
CLL079_first treatment	13	q14.2-q14.3	48,088,127	50,418,407	2,330,280	loss	-0.424
CLL079_post treatment	13	q14.2-q14.3	48,088,127	50,418,407	2,330,280	loss	-1.051
CLL080_first treatment	13	q14.3	49,532,667	50,359,721	827,054	loss	-0.200
CLL080_post treatment	13	q14.3	49,532,667	50,359,721	827,054	loss	-0.248
CLL081_first treatment	11	q14.1-q23.2	83,347,956	114,703,906	31,355,950	loss	-0.956
CLL081_post treatment	11	q14.1-q23.2	83,347,956	114,703,906	31,355,950	loss	-0.893
CLL082_first treatment	2	pter-p24.2	2,772	19,003,233	19,000,461	loss	-0.450
		p22.3-p16.3	34,478,915	52,473,808	17,994,893	loss	-0.463
		p16.1	55,632,699	58,397,402	2,764,703	loss	-0.410
		p15	62,800,162	63,040,618	240,456	loss	-0.423
		p14-p11.2	66,588,415	86,700,000	20,111,585	loss	-0.416
	4	pter-p15.1	2,269	33,885,885	33,883,616	loss	-0.620
	17	pter-p11.2	514	21,468,246	21,467,732	loss	-0.498
21	q22.11-q22.3	31,214,702	46,921,373	15,706,671	gain	0.286	
CLL082_post treatment	2	pter-p24.2	2,772	19,003,233	19,000,461	loss	-0.794
		p22.3-p16.3	34,478,915	52,473,808	17,994,893	loss	-0.815

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL082_post treatment	2	p16.1	55,632,699	58,397,402	2,764,703	loss	-0.833
		p15	62,800,162	63,040,618	240,456	loss	-0.855
		p14-p11.2	66,588,415	86,700,000	20,111,585	loss	-0.805
	4	pter-p15.1	2,269	33,885,885	33,883,616	loss	-0.831
	17	pter-p11.2	514	21,468,246	21,467,732	loss	-0.770
	21	q22.11-q22.3	31,214,702	46,921,373	15,706,671	gain	0.560
CLL083_first treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.679
CLL083_post treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.674
CLL084_first treatment	13	q14.2-q14.3	47,458,000	51,037,114	3,579,114	loss	-0.967
CLL084_post treatment	1	q42.12-q42.13	223,759,292	225,115,793	1,356,501	loss	-0.501
	13	q14.2-q14.3	47,458,000	51,037,114	3,579,114	loss	-0.913
CLL085_first treatment	6	q14.1-q25.1	79,845,731	151,565,315	71,719,584	loss	-1.056
	11	q22.3	107,389,600	107,838,550	448,950	loss	-1.115
CLL085_post treatment	6	q14.1-q25.1	79,845,731	151,565,315	71,719,584	loss	-0.881
	11	q22.3	107,389,600	107,838,550	448,950	loss	-0.872
CLL086_first treatment	4	pter-p15.1	2,269	28,059,604	28,057,335	loss	-0.334
	6	q22.31	118,830,190	119,258,568	428,378	gain	1.358
	21	pter-qter	9,777,583	46,921,373	37,143,790	gain	0.755
CLL086_post treatment	4	pter-p15.1	2,269	28,059,604	28,057,335	loss	-0.334
	6	q22.31	118,830,190	119,258,568	428,378	gain	1.190
	21	pter-qter	9,777,583	46,921,373	37,143,790	gain	0.606
CLL087_first treatment	11	q13.5-q24.1	76,111,339	122,917,293	46,805,954	loss	-0.217
		q14.1	77,113,479	83,457,074	6,343,595	loss	-0.348
		q22.1-q23.2	99,122,339	114,331,961	15,209,622	loss	-0.316
	13	q14.2-q14.3	48,494,258	50,085,576	1,591,318	loss	-0.251
CLL087_post treatment	11	q13.5-q24.1	76,111,339	122,917,293	46,805,954	loss	-0.448
		q14.1	77,113,479	83,457,074	6,343,595	loss	-0.808
		q22.1-q23.2	99,122,339	114,331,961	15,209,622	loss	-0.829
	13	q14.2-q14.3	48,494,258	50,085,576	1,591,318	loss	-0.200
CLL088_first treatment	2	pter-p15	2,772	63,156,703	63,153,931	gain	0.622
	4	pter-p15.1	56,707	29,688,795	29,632,088	loss	-0.462
	5	q33.1-qter	147,920,897	180,722,927	32,802,030	gain	0.461
	6	q16.1-q27	95,481,487	167,371,516	71,890,029	loss	-0.187
	7	pter-p21.1	52,899	15,837,963	15,785,064	loss	-0.864
	18	q22.3-qter	67,590,053	76,116,029	8,525,976	loss	-0.641
CLL088_post treatment	2	pter-p15	2,772	63,156,703	63,153,931	gain	0.333
	5	q33.1-qter	147,920,897	180,722,927	32,802,030	gain	0.219
	6	q16.1-q27	95,481,487	167,371,516	71,890,029	loss	-0.292
	7	pter-p21.1	52,899	15,837,963	15,785,064	loss	-0.379
	9	p21.3	21,966,858	23,457,079	1,490,221	loss	-0.470
	18	q22.3-qter	67,590,053	76,116,029	8,525,976	loss	-0.327
CLL089_first treatment	11	q21-q24.3	95,388,671	128,030,238	32,641,567	loss	-1.019
	13	q14.12-q14.3	45,676,791	50,631,049	4,954,258	loss	-1.106
		q14.3	49,658,769	50,181,466	522,697	loss	-2.210
CLL089_post treatment	2	pter-p13.3	2,772	72,268,158	72,265,386	gain	0.461
	4	pter-p16.1	2,269	6,719,914	6,717,645	loss	-0.846
	5	q14.3-qter	86,943,035	180,722,914	93,779,879	gain	0.472
	11	q21-q24.3	95,388,671	128,030,238	32,641,567	loss	-1.005

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL089_post treatment	13	q14.12-q14.3	45,676,791	50,631,049	4,954,258	loss	-1.055
	18	pter-p11.21	1,543	11,108,494	11,106,951	loss	-0.614
		p11.21	11,114,822	14,226,871	3,112,049	gain	0.437
CLL090_first treatment	11	q22.3-q23.3	104,490,185	115,992,909	11,502,724	loss	-1.141
	13	q14.11-q21.1	42,913,460	53,902,449	10,988,989	loss	-0.200
CLL090_post treatment	11	q22.3-q23.3	104,490,185	115,992,909	11,502,724	loss	-0.923
	13	q14.11-q21.1	42,913,460	53,902,449	10,988,989	loss	-0.220
CLL091_first treatment	3	p26.3	35,333	2,250,040	2,214,707	loss	-0.659
	8	p23.1-qter	111,436,336	146,268,947	34,832,611	gain	0.500
CLL091_post treatment	3	p26.3	35,333	2,250,040	2,214,707	loss	-0.931
	8	p23.1-qter	111,436,336	146,268,947	34,832,611	gain	0.625
CLL092_first treatment	6	p21.32	32,288,124	33,084,737	796,613	loss	-0.831
	13	q14.12-q14.3	45,535,700	50,900,268	5,364,568	loss	-1.042
		q21.31-q21.32	63,277,070	64,550,807	1,273,737	loss	-0.902
14	q31.3-q32.11	88,302,838	90,027,768	1,724,930	loss	-1.049	
CLL092_post treatment	6	p21.32	32,288,124	33,084,737	796,613	loss	-0.754
	13	q14.12-q14.3	45,535,700	50,900,268	5,364,568	loss	-0.742
		q21.31-q21.32	63,277,070	64,550,807	1,273,737	loss	-0.771
14	q31.3-q32.11	88,302,838	90,027,768	1,724,930	loss	-0.779	
CLL093_first treatment	6	q11.1-q24.3	62,842,626	146,388,992	83,546,366	loss	-1.185
CLL093_post treatment	6	q11.1-q24.3	62,842,626	146,388,992	83,546,366	loss	-1.185
	8	q24.13-q24.3	124,034,000	146,268,947	22,234,947	gain	0.413
	10	pter-p14	62,747	10,112,230	10,049,483	loss	-0.287
		p13-p11.22	13,247,477	34,190,827	20,943,350	loss	-0.258
	13	q31.1	83,169,767	83,427,928	258,161	gain	0.423
		q31.1-q31.2	84,629,259	87,789,182	3,159,923	gain	0.499
		q31.2	87,791,958	88,345,865	553,907	gain	0.989
	17	pter-p11.2	514	21,834,506	21,833,992	loss	-0.504
		p11.2	21,834,615	22,037,528	202,913	gain	0.302
18	p11.32-p11.23	221,508	8,468,169	8,246,661	loss	-0.414	
CLL094_first treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.544
CLL094_post treatment	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.499
CLL095_first treatment	1	p36.11-p25.3	25,646,657	28,823,449	3,176,792	loss	-0.435
	3	p26.3	1,178,416	1,900,097	721,681	loss	-0.461
	3	p21.31	46,152,757	48,892,131	2,739,374	loss	-0.455
	11	q14.1-q23.2	83,169,217	114,303,392	31,134,175	loss	-0.392
	13	q14.3	49,502,618	50,161,858	659,240	loss	-0.396
CLL095_post treatment	1	p36.11-p25.3	25,646,657	28,823,449	3,176,792	loss	-0.621
	3	p26.3	1,178,416	1,900,097	721,681	loss	-0.559
		p21.31	46,152,757	48,892,131	2,739,374	loss	-0.568
	11	q14.1-q23.2	83,169,217	114,303,392	31,134,175	loss	-0.570
13	q14.3	49,502,618	50,161,858	659,240	loss	-0.288	
CLL096_first treatment	13	q14.3	49,421,659	50,367,799	946,140	loss	-2.094
CLL096_post treatment	3	p24.3-p24.2	16,938,923	23,976,082	7,037,159	loss	-0.232
	13	q14.3	49,421,659	50,367,799	946,140	loss	-0.516
CLL097_first treatment	2	p16.1-p15	58,139,058	62,432,681	4,293,623	gain	0.705
	11	q22.1-q23.3	101,562,306	116,362,838	14,800,532	loss	-1.081
	13	q12.2	26,868,934	27,219,581	350,647	loss	-0.574

ID	Chr.	Cytoband	Segment Start [bp]	Segment Stop [bp]	Segment Length [bp]	Type of CNA	Mean Log2 Ratio
CLL097_first treatment	13	q14.3	48,929,869	50,475,702	1,545,833	loss	-0.692
	18	q23	75,252,935	75,427,447	174,512	loss	-0.748
CLL097_post treatment	2	p16.1-p15	58,139,058	62,432,681	4,293,623	gain	0.413
	11	q22.1-q23.3	101,562,306	116,362,838	14,800,532	loss	-0.762
	13	q12.2	26,868,934	27,219,581	350,647	loss	-0.434
		q14.3	48,929,869	50,475,702	1,545,833	loss	-0.574
18	q23	75,252,935	75,427,447	174,512	loss	-0.619	
CLL098_first treatment	11	q21-q23.1	95,358,899	110,244,765	14,885,866	loss	-1.016
	13	q14.2-q14.3	47,933,218	51,395,065	3,461,847	loss	-1.043
CLL098_post treatment	11	q21-q23.1	95,358,899	110,244,765	14,885,866	loss	-0.283
	13	q14.2-q14.3	47,933,218	51,395,065	3,461,847	loss	-0.275
CLL099_first treatment	11	q21-q23.2	95,683,286	113,814,530	18,131,244	loss	-0.592
	13	q14.12-q14.3	45,798,922	50,592,326	4,793,404	loss	-0.638
CLL099_post treatment	4	q13.3-q22.3	70,549,400	97,512,125	26,962,725	loss	-0.621
	11	q21-q23.3	95,636,878	116,441,939	20,805,061	loss	-0.512
		q21-q23.2	95,683,286	113,814,530	18,131,244	loss	-0.874
	13	q14.12-q14.3	45,798,922	50,592,326	4,793,404	loss	-0.831
CLL100_first treatment	/						
CLL100_post treatment	17	p13.3-p13.1	1,127,395	7,501,560	6,374,165	loss	-0.247
		q25.1-q25.2	71,105,010	72,336,396	1,231,386	loss	-0.229
CLL101_first treatment	5	q32	146,149,340	146,790,575	641,235	gain	0.770
	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.648
	15	q26.3	99,584,813	99,926,399	341,586	gain	0.807
	22	q11.21	16,456,523	17,030,682	574,159	gain	0.809
CLL101_post treatment	5	q32	146,149,340	146,790,575	641,235	gain	0.759
	12	pter-qter	20,691	132,288,250	132,267,559	gain	0.693
	15	q26.3	99,584,813	99,926,399	341,586	gain	0.817
	22	q11.21	16,456,523	17,030,682	574,159	gain	0.788
CLL102_first treatment	2	pter-p14	2,772	65,473,284	65,470,512	gain	0.704
	11	q21-q24.3	93,006,972	127,982,682	34,975,710	loss	-0.897
	13	q14.3	48,988,410	50,400,939	1,412,529	loss	-0.819
CLL102_post treatment	2	pter-p14	2,772	65,473,284	65,470,512	gain	0.749
	11	q21-q24.3	93,006,972	127,982,682	34,975,710	loss	-0.971
	13	q14.3	48,988,410	50,400,939	1,412,529	loss	-0.913
CLL103_first treatment	2	pter-p13	2,772	66,146,505	66,143,733	gain	0.353
	4	pter-p15.31	55,749	18,644,784	18,589,035	loss	-0.593
CLL103_post treatment	2	pter-p14	2,772	66,146,505	66,143,733	gain	0.703
	4	pter-p15.31	55,749	18,644,784	18,589,035	loss	-1.056

Supplementary Table S3:

Acquired copy-neutral loss of heterozygosity (CN-LOH) within the sequential samples of 103 analyzed cases. CN-LOHs are listed by providing start and stop positions referring to the UCSC Genome Browser; assembly March 2006, NCBI36/hg18 (<http://www.genome.ucsc.edu/>).

SNP-ID	Chr.	Cytoband	SNP Start Position	SNP Stop Position	Segment Start [Mb]	Segment Stop [Mb]
CLL101	1	pter - p13.2	SNP_A-8420886	SNP_A-8448168	1,038,818	112,729,435
CLL047	9	pter - p11.2	SNP_A-8451753	SNP_A-4228947	36,587	43,493,496
CLL042	13	q14.3 - qter	SNP_A-8462887	SNP_A-8315664	50,814,168	114,082,644
CLL029	18	q23 - qter	SNP_A-8583673	SNP_A-2234800	72,157,588	76,115,554
CLL042	18	q11.2 - qter	SNP_A-8299818	SNP_A-2234800	17,407,492	76,115,554
CLL102	18	q12.2 - qter	SNP_A-4268865	SNP_A-4302082	31,541,458	76,069,383

Supplementary Table S4:

Frequency of cytogenetic risk markers in the FC treated patient group and the FCR treated patient group.

	FC treated patients (N=46)		FCR treated patients (N=40)	
<i>IgHV</i> mutated	N=12	26%	N=9	22.50%
<i>IgHV</i> unmutated	N=32	70%	N=31	77.50%
<i>IgHV</i> unknown	N=2	4%	/	/
Del(17p)	N=2	4%	N=5	12.50%
<i>TP53</i>mut	N=7	15%	N=6	15%
Del(17p) and/or <i>TP53</i>mut	N=8	17%	N=6	15%
Del(11q)	N=17	37%	N=17	42.50%
Del(13q) as sole abnormality	N=7	15%	N=7	17.50%
Normal Karyotype	N=7	15%	N=6	15%

Supplementary Table S5:

Minimal residual disease (MRD) levels measured at interim response assessment (after three cycles of therapy, N=52/86), at initial response assessment (one month after the last treatment cycle, N=41/86) and at final response assessment (three months after the third treatment cycle, N=59/86). MRD levels are reported as fraction of CLL cells of all nucleated cells.

SNP-ID	MRD Interim Response Assessment	MRD Initial Response Assessment	MRD Final Response Assessment	MRD Negativity
CLL018	0.000361	n.a.	n.a.	n.a.
CLL019	n.a.	n.a.	<0.0001	yes
CLL020	n.a.	n.a.	0.002374	no
CLL021	0.046004	n.a.	0.006642	no
CLL022	0.036990	0.038335	0.031105	no
CLL023	n.a.	n.a.	n.a.	n.a.
CLL024	0.004653	0.000596	0.000305	no
CLL025	0.041805	0.020647	0.042569	no
CLL026	0.035683	n.a.	n.a.	n.a.
CLL027	0.270287	n.a.	n.a.	n.a.
CLL028	0.014007	n.a.	n.a.	n.a.
CLL029	0.689911	0.524507	0.554558	no
CLL030	0.466924	0.347536	0.412751	no
CLL031	0.050804	n.a.	0.029144	no
CLL032	<0.0001	n.a.	<0.0001	yes
CLL033	0.006653	0.000045	0.000030	yes
CLL034	n.a.	<0.0001	<0.0001	yes
CLL035	0.103020	0.086546	0.141167	no
CLL036	0.041082	0.012020	0.043486	no
CLL037	0.007325	n.a.	0.000517	no
CLL038	n.a.	n.a.	n.a.	n.a.
CLL039	n.a.	<0.0001	<0.0001	yes
CLL040	n.a.	n.a.	n.a.	n.a.
CLL041	0.342997	0.076322	0.225996	no
CLL042	0.000099	n.a.	n.a.	yes
CLL043	0.000672	<0.0001	<0.0001	yes
CLL044	0.001654	0.000066	0.000034	yes
CLL045	0.005839	0.001497	0.000858	no
CLL046	n.a.	0.000356	0.000304	no
CLL047	n.a.	n.a.	n.a.	n.a.
CLL048	n.a.	n.a.	0.002126	no
CLL049	0.140914	n.a.	<0.0001	yes
CLL050	n.a.	n.a.	0.001006	no
CLL051	<0.0001	n.a.	n.a.	yes
CLL052	n.a.	n.a.	n.a.	n.a.

SNP-ID	MRD Interim Response Assessment	MRD Initial Response Assessment	MRD Final Response Assessment	MRD Negativity
CLL053	0.001522	0.000239	0.000763	no
CLL054	n.a.	<0.0001	<0.0001	yes
CLL055	n.a.	<0.0001	<0.0001	yes
CLL056	0.013517	0.002159	n.a.	n.a.
CLL057	0.007913	0.000071	n.a.	yes
CLL058	0.000113	<0.0001	n.a.	yes
CLL059	0.038737	0.002840	n.a.	n.a.
CLL060	n.a.	0.665600	n.a.	n.a.
CLL061	n.a.	0.000680	0.000155	no
CLL062	0.002094	<0.0001	<0.0001	yes
CLL063	0.000602	n.a.	<0.0001	yes
CLL064	n.a.	0.039381	n.a.	n.a.
CLL065	n.a.	0.022260	0.038365	no
CLL066	0.017497	0.000417	0.001112	no
CLL067	n.a.	n.a.	0.096316	no
CLL068	n.a.	n.a.	<0.0001	yes
CLL069	0.082293	n.a.	0.220647	no
CLL070	0.000844	0.000041	0.000077	yes
CLL071	n.a.	n.a.	0.016308	no
CLL072	0.063528	0.010216	0.013766	no
CLL073	0.074100	n.a.	0.004751	no
CLL074	n.a.	n.a.	0.093507	no
CLL075	0.012443	n.a.	n.a.	n.a.
CLL076	n.a.	n.a.	n.a.	n.a.
CLL077	0.281683	n.a.	0.138981	no
CLL078	0.013818	0.000136	0.000174	no
CLL079	0.002436	n.a.	<0.0001	yes
CLL080	0.116849	n.a.	0.002795	no
CLL081	0.005495	<0.0001	<0.0001	yes
CLL082	0.342743	0.451436	0.715403	no
CLL083	n.a.	n.a.	n.a.	n.a.
CLL084	0.021575	0.007903	0.042741	no
CLL085	n.a.	0.864112	n.a.	n.a.
CLL086	0.005884	0.000416	0.001114	no
CLL087	n.a.	n.a.	<0.0001	yes
CLL088	0.000144	n.a.	n.a.	n.a.
CLL089	0.003949	0.000249	0.000524	no
CLL090	0.060645	0.015083	0.022648	no
CLL091	n.a.	n.a.	n.a.	n.a.
CLL092	n.a.	n.a.	0.025638	no
CLL093	n.a.	n.a.	n.a.	n.a.
CLL094	0.003041	<0.0001	n.a.	yes
CLL095	n.a.	n.a.	<0.0001	yes
CLL096	0.005232	<0.0001	0.000042	yes
CLL097	n.a.	n.a.	0.000393	no

SNP-ID	MRD Interim Response Assessment	MRD Initial Response Assessment	MRD Final Response Assessment	MRD Negativity
CLL098	n.a.	n.a.	n.a.	n.a.
CLL099	n.a.	n.a.	n.a.	n.a.
CLL100	0.000268	n.a.	<0.0001	yes
CLL101	0.012642	n.a.	0.000499	no
CLL102	n.a.	n.a.	<0.0001	yes
CLL103	0.002769	0.000145	0.000375	no

Supplementary Table S6:

Observed mutations in *TP53* and *ATM* (all coding exons) for each case within the sequential samples of 103 analyzed cases.

Sample ID	Platform	<i>ATM</i> Mutation	<i>ATM</i> Mutation (Variant Fraction)	<i>TP53</i> Mutation	<i>TP53</i> Mutation (Variant Fraction)
CLL001_pre-treatment	MiSeq	-	-	-	-
CLL001_first treatment	MiSeq & WES	-	-	-	-
CLL002_pre-treatment	MiSeq	-	-	-	-
CLL002_first treatment	WES	-	-	-	-
CLL003_pre-treatment	MiSeq	-	-	-	-
CLL003_first treatment	MiSeq	-	-	-	-
CLL004_pre-treatment	MiSeq	-	-	-	-
CLL004_first treatment	WES	-	-	-	-
CLL005_pre-treatment	MiSeq	K820R	0.08	-	-
CLL005_first treatment	WES	K820R	0.04	-	-
CLL006_pre-treatment	MiSeq	-	-	-	-
CLL006_first treatment	MiSeq	-	-	-	-
CLL007_pre-treatment	MiSeq	-	-	-	-
CLL007_first treatment	MiSeq	-	-	-	-
CLL008_pre-treatment	MiSeq	-	-	-	-
CLL008_first treatment	MiSeq	-	-	-	-
CLL009_pre-treatment	MiSeq	-	-	-	-
CLL009_first treatment	MiSeq	-	-	-	-
CLL010_pre-treatment	WES	-	-	-	-
CLL010_first treatment	MiSeq	-	-	-	-
CLL011_pre-treatment	MiSeq	-	-	-	-
CLL011_first treatment	MiSeq	-	-	-	-
CLL012_pre-treatment	MiSeq	-	-	E258K	0.666
CLL012_first treatment	MiSeq	-	-	E258K	0.955
CLL013_pre-treatment	MiSeq	Y2019C	0.344	-	-
CLL013_first treatment	MiSeq	Y2019C	0.05	-	-

Sample ID	Platform	ATM Mutation	ATM Mutation (Variant Fraction)	TP53 Mutation	TP53 Mutation (Variant Fraction)
CLL014_pre-treatment	MiSeq	-	-	-	-
CLL014_first treatment	MiSeq	-	-	-	-
CLL015_pre-treatment	MiSeq	-	-	-	-
CLL015_first treatment	MiSeq	-	-	-	-
CLL016_pre-treatment	MiSeq	-	-	-	-
CLL016_first treatment	MiSeq	-	-	-	-
CLL017_pre-treatment	MiSeq	-	-	K132Q	0.139
CLL017_first treatment	MiSeq	-	-	K132Q	0.229
CLL018_pre-treatment	MiSeq	I2888T	0.462	-	-
CLL018_first treatment	MiSeq	I2888T	0.54	-	-
CLL018_post treatment	MiSeq	M3011K	0.445	-	-
CLL019_pre-treatment	MiSeq	E1091fs	0.023	-	-
CLL019_first treatment	MiSeq	E1091fs // E2164K	0.253 // 0.418	-	-
CLL019_post treatment	MiSeq	E1091fs	0.25	-	-
CLL020_pre-treatment	MiSeq	-	-	-	-
CLL020_first treatment	WES	-	-	-	-
CLL020_post treatment	MiSeq	-	-	-	-
CLL021_pre-treatment	MiSeq	-	-	-	-
CLL021_first treatment	MiSeq & WES	-	-	-	-
CLL021_post treatment	WES	-	-	-	-
CLL022_pre-treatment	MiSeq	-	-	L111fs	0.712
CLL022_first treatment	WES	-	-	L111fs	1
CLL022_post treatment	WES	-	-	L111fs	0.466
CLL023_pre-treatment	MiSeq	-	-	A138V	0.117
CLL023_first treatment	MiSeq	-	-	A138V	0.085
CLL023_post treatment	MiSeq	-	-	A138V	0.878
CLL024_pre-treatment	MiSeq	-	-	-	-
CLL024_first treatment	MiSeq	-	-	-	-
CLL024_post treatment	MiSeq	-	-	-	-

Sample ID	Platform	ATM Mutation	ATM Mutation (Variant Fraction)	TP53 Mutation	TP53 Mutation (Variant Fraction)
CLL025_pre-treatment	MiSeq	-	-	-	-
CLL025_first treatment	MiSeq	-	-	-	-
CLL025_post treatment	MiSeq & WES	-	-	-	-
CLL026_pre-treatment	MiSeq	T1953I	0.707	-	-
CLL026_first treatment	MiSeq	T1953I	0.399	-	-
CLL026_post treatment	MiSeq	-	-	-	-
CLL027_pre-treatment	MiSeq	-	-	-	-
CLL027_first treatment	MiSeq	-	-	splice site	0.01
CLL027_post treatment	MiSeq	-	-	R337C // splice site	0.087 // 0.735
CLL028_first treatment	WES	T761fs	0.332	-	-
CLL028_post treatment	MiSeq & WES	S707P // T761fs	0.820 // 0.784	-	-
CLL029_first treatment	MiSeq & WES	-	-	G245D	0.439
CLL029_post treatment	MiSeq & WES	-	-	G245D	0.565
CLL030_first treatment	WES	-	-	D281N	0.756
CLL030_post treatment	MiSeq & WES	-	-	D281N	0.546
CLL031_first treatment	MiSeq & WES	-	-	D281G // R280G	0.292 // 0.469
CLL031_post treatment	WES	-	-	D281G // R280G	0.079 // 0.292
CLL032_first treatment	WES	-	-	-	-
CLL032_post treatment	MiSeq & WES	-	-	-	-
CLL033_first treatment	WES	-	-	-	-
CLL033_post treatment	MiSeq & WES	-	-	-	-
CLL034_first treatment	WES	-	-	-	-
CLL034_post treatment	MiSeq & WES	-	-	-	-
CLL035_first treatment	MiSeq & WES	-	-	R158L	0.073
CLL035_post treatment	MiSeq & WES	-	-	R248Q // R158L	0.111 // 0.744
CLL036_first treatment	MiSeq	-	-	-	-
CLL036_post treatment	MiSeq	-	-	-	-
CLL037_first treatment	MiSeq	-	-	-	-
CLL037_post treatment	MiSeq	-	-	P152L	0.12

Sample ID	Platform	ATM Mutation	ATM Mutation (Variant Fraction)	TP53 Mutation	TP53 Mutation (Variant Fraction)
CLL038_first treatment	MiSeq	-	-	-	-
CLL038_post treatment	MiSeq	-	-	-	-
CLL039_first treatment	MiSeq & WES	-	-	-	-
CLL039_post treatment	MiSeq	splice site	0.15	-	-
CLL040_first treatment	MiSeq & WES	-	-	-	-
CLL040_post treatment	MiSeq & WES	-	-	-	-
CLL041_first treatment	MiSeq	-	-	-	-
CLL041_post treatment	MiSeq	-	-	-	-
CLL042_first treatment	WES	-	-	-	-
CLL042_post treatment	MiSeq & WES	-	-	V157F	0.379
CLL043_first treatment	WES	-	-	-	-
CLL043_post treatment	MiSeq & WES	-	-	-	-
CLL044_first treatment	WES	-	-	-	-
CLL044_post treatment	MiSeq & WES	-	-	-	-
CLL045_first treatment	MiSeq	-	-	splice site	0.532
CLL045_post treatment	MiSeq	-	-	splice site	0.511
CLL046_first treatment	WES	-	-	-	-
CLL046_post treatment	MiSeq & WES	-	-	-	-
CLL047_first treatment	WES	-	-	-	-
CLL047_post treatment	MiSeq & WES	-	-	-	-
CLL048_first treatment	WES	-	-	-	-
CLL048_post treatment	MiSeq & WES	-	-	-	-
CLL049_first treatment	WES	-	-	-	-
CLL049_post treatment	MiSeq	-	-	H179Y	0.145
CLL050_first treatment	WES	-	-	-	-
CLL050_post treatment	MiSeq	-	-	-	-
CLL051_first treatment	WES	-	-	-	-
CLL051_post treatment	WES	-	-	-	-
CLL052_first treatment	WES	-	-	-	-
CLL052_post treatment	MiSeq	-	-	-	-

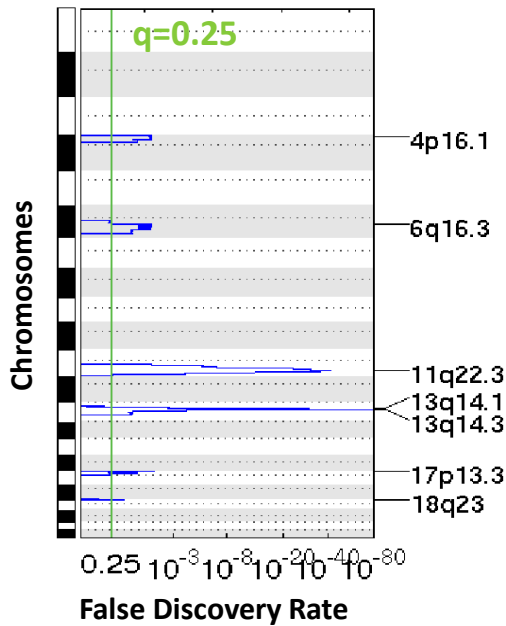
Sample ID	Platform	ATM Mutation	ATM Mutation (Variant Fraction)	TP53 Mutation	TP53 Mutation (Variant Fraction)
CLL053_first treatment	WES	-	-	-	-
CLL053_post treatment	WES	-	-	T123fs	0.386
CLL054_first treatment	WES	L2890P	0.308	-	-
CLL054_post treatment	MiSeq & WES	-	-	W53*	0.66
CLL055_first treatment	WES	-	-	-	-
CLL055_post treatment	MiSeq	M2936fs	0.683	-	-
CLL056_first treatment	WES	-	-	-	-
CLL056_post treatment	MiSeq	-	-	-	-
CLL057_first treatment	MiSeq	-	-	-	-
CLL057_post treatment	MiSeq	-	-	-	-
CLL058_first treatment	MiSeq & WES	L481fs	0.09	-	-
CLL058_post treatment	MiSeq & WES	L481fs	0.066	-	-
CLL059_first treatment	WES	g.chr11:108121499T>C, g.chr11:108216546G>T	0.393 // 0.343	-	-
CLL059_post treatment	MiSeq & WES	L436P	0.16	-	-
CLL060_first treatment	WES	-	-	-	-
CLL060_post treatment	WES	E390K // I678N // E688K // Q700K // H1474N // Y1475* // C2286F	0.093 // 0.119 // 0.143 // 0.143 // 0.2 // 0.2 // 0.374	R290H // R110C	0.562 // 0.14
CLL061_first treatment	WES	-	-	-	-
CLL061_post treatment	MiSeq & WES	-	-	-	-
CLL062_first treatment	WES	-	-	-	-
CLL062_post treatment	MiSeq & WES	-	-	-	-
CLL063_first treatment	WES	-	-	-	-
CLL063_post treatment	MiSeq & WES	-	-	R209fs*7	0.61
CLL064_first treatment	MiSeq & WES	F492fs // splice site	0.353 // 0.479	H193R	0.089
CLL064_post treatment	WES	F492fs // splice site	0.403 // 0.362	H193R	0.238
CLL065_first treatment	MiSeq	-	-	-	-
CLL065_post treatment	MiSeq	-	-	-	-
CLL066_first treatment	WES	-	-	-	-
CLL066_post treatment	MiSeq & WES	-	-	-	-

Sample ID	Platform	ATM Mutation	ATM Mutation (Variant Fraction)	TP53 Mutation	TP53 Mutation (Variant Fraction)
CLL067_first treatment	MiSeq	-	-	-	-
CLL067_post treatment	MiSeq	-	-	-	-
CLL068_first treatment	WES	-	-	-	-
CLL068_post treatment	MiSeq & WES	-	-	V157F	0.569
CLL069_first treatment	MiSeq	-	-	-	-
CLL069_post treatment	MiSeq	-	-	-	-
CLL070_first treatment	MiSeq	-	-	-	-
CLL070_post treatment	MiSeq	-	-	R306*	0.322
CLL071_first treatment	MiSeq	-	-	C135Y	0.159
CLL071_post treatment	MiSeq	-	-	C135Y	0.427
CLL072_first treatment	MiSeq	-	-	-	-
CLL072_post treatment	MiSeq & WES	-	-	-	-
CLL073_first treatment	WES	-	-	-	-
CLL073_post treatment	MiSeq & WES	-	-	C141F // A276P	0.13 // 0.21
CLL074_first treatment	MiSeq	-	-	L194R	0.996
CLL074_post treatment	MiSeq	-	-	L194R	0.931
CLL075_first treatment	WES	R1875* // splice site	0.426 // 0.929	-	-
CLL075_post treatment	MiSeq & WES	R1875*// splice site	0.926 // 0.974	-	-
CLL076_first treatment	MiSeq	-	-	-	-
CLL076_post treatment	MiSeq	-	-	G154fs // P153del	0.499 // 0.367
CLL077_first treatment	MiSeq	-	-	H193Y	0.536
CLL077_post treatment	MiSeq	-	-	H193Y	0.513
CLL078_first treatment	MiSeq	-	-	-	-
CLL078_post treatment	MiSeq & WES	-	-	-	-
CLL079_first treatment	MiSeq	-	-	-	-
CLL079_post treatment	MiSeq & WES	-	-	-	-
CLL080_first treatment	MiSeq	-	-	-	-
CLL080_post treatment	MiSeq	-	-	-	-
CLL081_first treatment	MiSeq	-	-	-	-
CLL081_post treatment	MiSeq	-	-	-	-

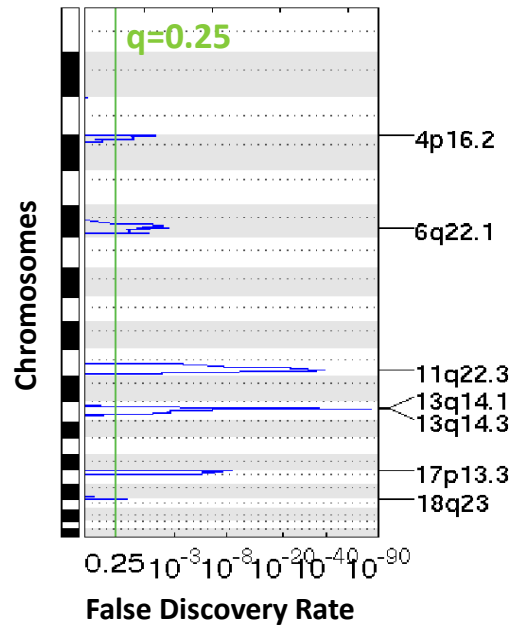
Sample ID	Platform	ATM Mutation	ATM Mutation (Variant Fraction)	TP53 Mutation	TP53 Mutation (Variant Fraction)
CLL082_first treatment	MiSeq	-	-	R273C	0.335
CLL082_post treatment	MiSeq	-	-	R273C	0.938
CLL083_first treatment	MiSeq	-	-	-	-
CLL083_post treatment	MiSeq	-	-	-	-
CLL084_first treatment	WES	-	-	-	-
CLL084_post treatment	MiSeq & WES	-	-	-	-
CLL085_first treatment	MiSeq	-	-	-	-
CLL085_post treatment	MiSeq	-	-	-	-
CLL086_first treatment	WES	-	-	-	-
CLL086_post treatment	MiSeq	-	-	-	-
CLL087_first treatment	WES	-	-	-	-
CLL087_post treatment	MiSeq & WES	-	-	-	-
CLL088_first treatment	MiSeq	-	-	-	-
CLL088_post treatment	MiSeq	-	-	-	-
CLL089_first treatment	WES	G1522R	0.071	-	-
CLL089_post treatment	MiSeq & WES	G1522R	0.498	-	-
CLL090_first treatment	MiSeq	T2438R	0.118	-	-
CLL090_post treatment	MiSeq	T2438R	0.152	-	-
CLL091_first treatment	MiSeq	-	-	-	-
CLL091_post treatment	MiSeq & WES	-	-	-	-
CLL092_first treatment	MiSeq	-	-	-	-
CLL092_post treatment	MiSeq	-	-	-	-
CLL093_first treatment	WES	-	-	-	-
CLL093_post treatment	WES	-	-	R273H	0.315
CLL094_first treatment	WES	-	-	-	-
CLL094_post treatment	WES	-	-	-	-
CLL095_first treatment	WES	-	-	-	-
CLL095_post treatment	WES	-	-	-	-
CLL096_first treatment	WES	-	-	-	-
CLL096_post treatment	WES	W308R // G1267fs // V2731L	0.148 // 0.522 // 0.239	-	-

Sample ID	Platform	ATM Mutation	ATM Mutation (Variant Fraction)	TP53 Mutation	TP53 Mutation (Variant Fraction)
CLL097_first treatment	WES	-	-	-	-
CLL097_post treatment	WES	-	-	-	-
CLL098_first treatment	WES	-	-	-	-
CLL098_post treatment	WES	-	-	-	-
CLL099_first treatment	WES	Y41C, R2598*	0.12	-	-
CLL099_post treatment	WES	D2725N // T2947*	0.227 // 0.496	-	-
CLL100_first treatment	WES	-	-	-	-
CLL100_post treatment	MiSeq & WES	-	-	V157F	0.259
CLL101_first treatment	WES	-	-	-	-
CLL101_post treatment	WES	-	-	-	-
CLL102_first treatment	WES	E1346fs	0.91	-	-
CLL102_post treatment	WES	E1346fs // Q2615fs	0.611 // 0.367	-	-
CLL103_first treatment	WES	-	-	-	-
CLL103_post treatment	WES	-	-	R273H	0.369

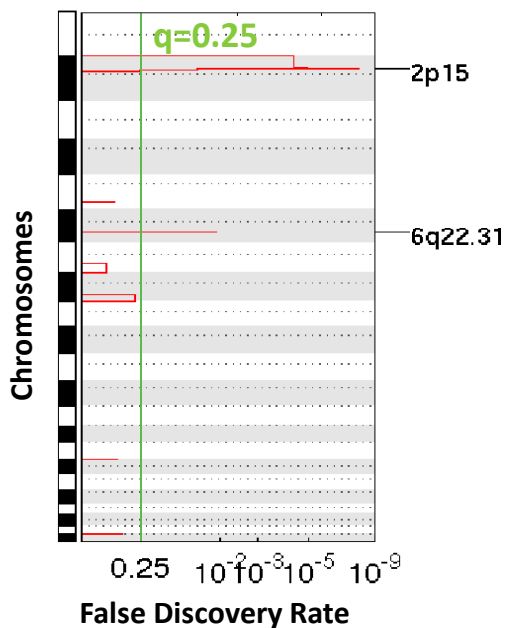
Significant Regions of Deletion at Treatment-Initiation



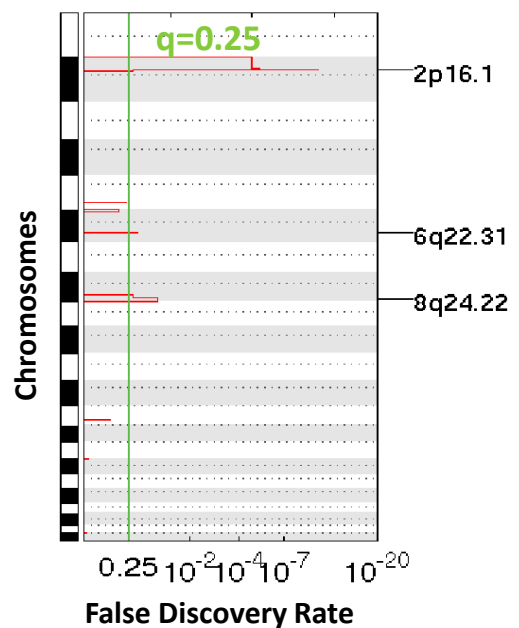
Significant Regions of Deletion at Relapse



Significant Regions of Amplification at Treatment-Initiation



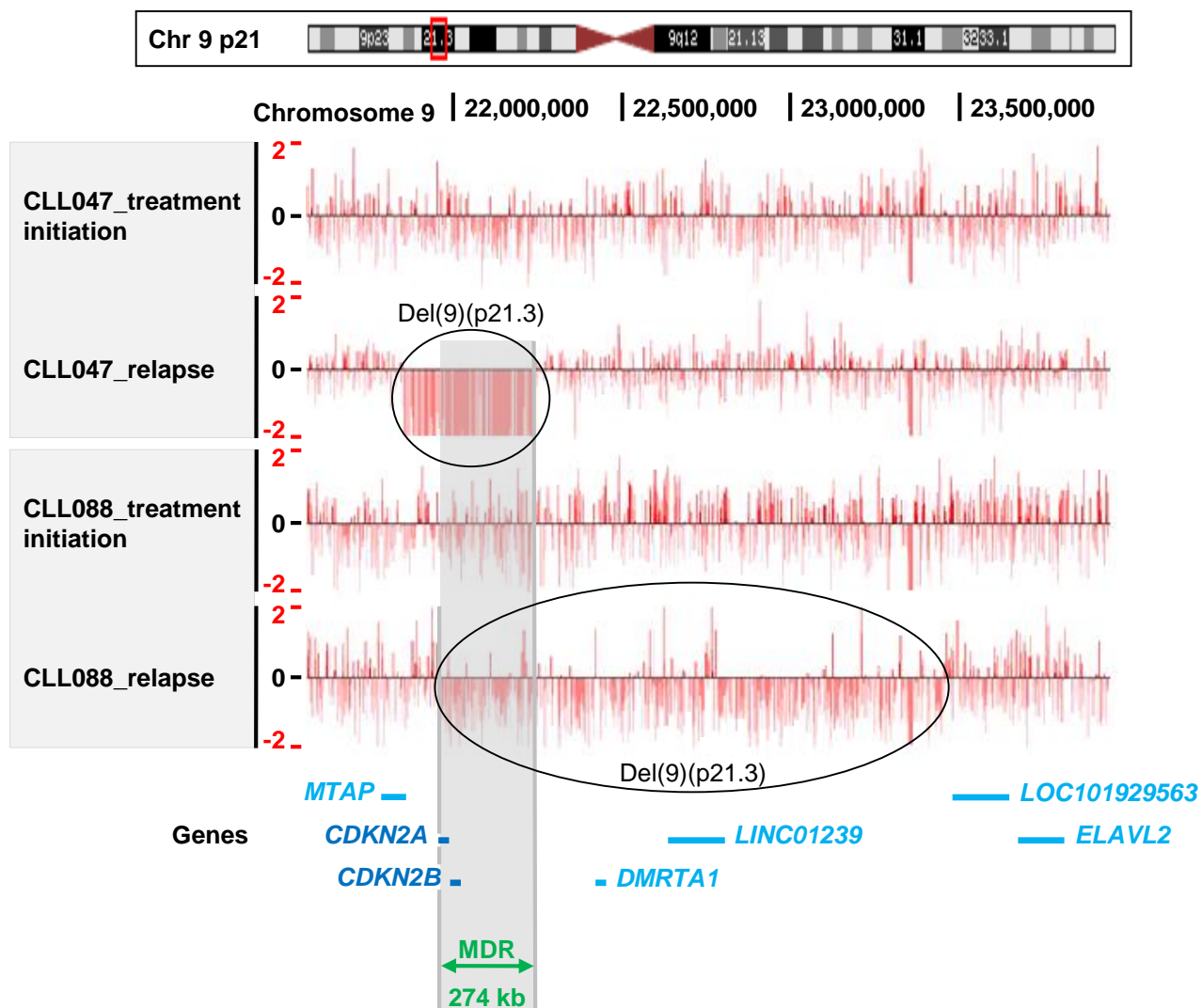
Significant Regions of Amplification at Relapse



Supplementary Figure S1:

Analysis of copy number losses (top) and gains (bottom) at treatment-initiation (left) and relapse (right) by GISTIC.

False Discovery Rate q-values are plotted along the x-axis. Chromosomal positions are plotted along the y-axis. Altered regions with significance levels exceeding 0.25 (marked by vertical green line) were deemed to be significant. Comparing results at treatment-initiation with the corresponding ones at relapse showed an increase in significance for 17p loss and new significance for 8q gain with inclusion of the *c-MYC* locus at 75% confidence.

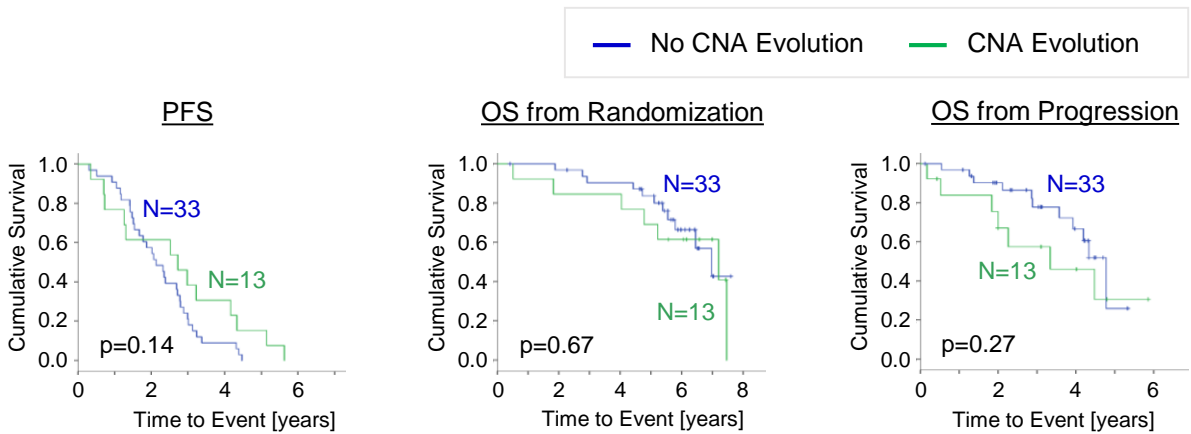


Supplementary Figure S2:

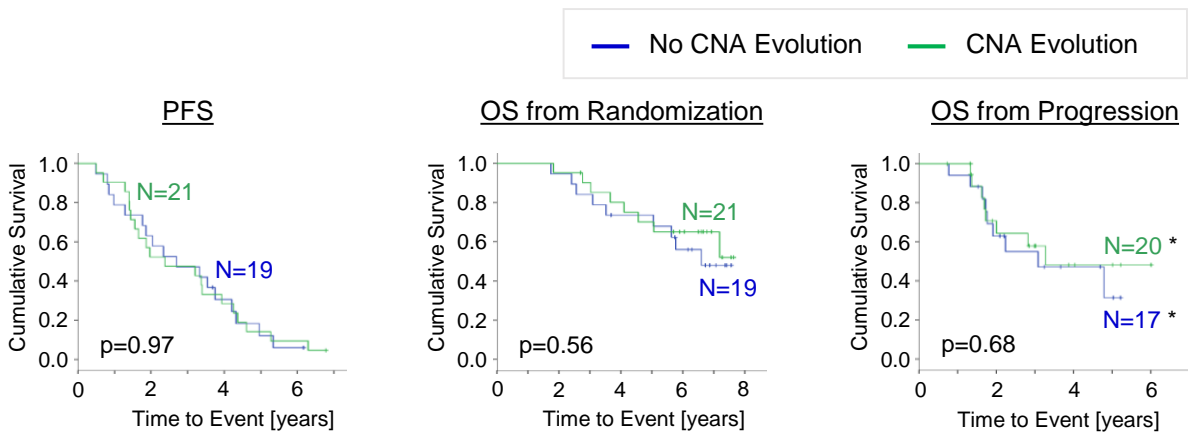
Shown is the minimally deleted region (MDR) in 9p21.3 defined by two relapse samples (#CLL047_relapse, #CLL088_relapse) with a size of 273.716 kb containing only *CDKN2A* and *CDKN2B*. At time of treatment-initiation both deletions in 9p21.3 were not detectable.

Displayed is the raw log₂-ratio, chromosome 9, blotted to the UCSC genomw browser (hg18). Each red bar represents the determined log₂-ratio of a single probe set sorted by their physical position along the chromosome.

A: Survival related to CNA evolution in FC treated patients



B: Survival related to CNA evolution in FCR treated patients



* 3 patients of the target analysis population do not have documented progressive disease.

Supplementary Figure S3:

Kaplan-Meier estimates for patients treated with FC (A) and for patients treated with FCR (B); progression free survival (PFS) and overall survival (OS); according to the presence of CNA evolution. P-values are based on log-rank tests.