Supplementary Materials

Table S1. Characterization of patient's samples.

Patient No.	Age	Sex	Leu ($\times 10^9$/l)	Lym (%)	*IGHV* mutational status	*TP53* mutational status	Cytogenetic aberrations and other prognostically relevant molecular changes	Years after CLL diagnosis	Treatment
1	83	Female	93.7	92.8	Unmutated	Wild type	-X; +12	9	1. BR 2. Rituximab, chlorambucil
2	75	Male	162.0	87.4	Unmutated	Wild type	ZAP70 positive; RB1 deletion	10	1. Reduced BR
3	62	Male	61.6	90.5	Unmutated	Mutated cumulatively in 57.25 % cells	del13q; del11q	7	1. Reduced FCR 2. Lumbar spine radiotherapy 3. BR 4. Acalabrutinib
4	66	Female	123.0	93.4	Unmutated	Deletion in 22 % cells; mutated cumulatively in 34.83 % cells	8q24/MYC rearrangement	4	1. Alemtuzumab 2. Ibrutinib
5	58	Male	77.4	86.7	Unmutated	Wild type	del13q14	2	None
6	65	Female	59.0	85.8	Mutated	Wild type	Biclonal CLL	8	None
7	83	Female	108.0	92.2	Unmutated	Mutated cumulatively in 91 % cells	13q14 biallelic deletion	9	1. Alemtuzumab 2. Prednisonum

Leu – leukocytes; Lym – lymphocytes; *IGHV* – immunoglobulin heavy variable gene; *TP53* – tumor protein 53 gene; CLL – chronic lymphocytic leukemia; ZAP70 – zeta chain of T cell receptor associated protein kinase 70; RB1 – retinoblastoma protein 1; MYC – mylocytomatosis oncogene; BR – bendamustine, rituximab; FCR – fludarabine, cyclophosphamide, rituximab.

Table S2. Statistical evaluation of the effect of modification with RGDS peptide and plate shaking on cellular metabolic activity.

Cells	Probability (p)	
	RGDS	Shaking
HS-5	0.451270	0.000014
M2-10B4	0.322289	0.009031
MEC-1	0.248244	0.083556
HG-3	0.743284	0.197314
Primary B-CLLs	0.000003	0.890298

Significant values are in red. B-CLLs – chronic lymphocytic leukemia cells.

Table S3. Statistical evaluation of co-culture with M210B4 supported with medium flow on primary CLL cells (B-CLLs) survival.

Effect	Probability (p)
M2-10B4 co-culture	0.13695
Shaking	0.50816

Table S4. Statistical evaluation of the effect of the interleukin 4 (IL-4) and CD40 ligand (CD-40L) added into shaken and unshaken medium on primary B-CLLs metabolic activity.

Effect	Probability (p)
CD40L	0.8099767
IL-4	0.3813562
Shaking	0.0522501

Table S5. Characterization of cell line sources.

Cell line	Source	Reference
MEC-1	Established from the peripheral blood of a 61-year-old Caucasian man with chronic lymphocytic leukemia (CLL) transformed to B-cell prolymphocytic leukemia (B-PLL)	[1]
HG-3	Established from leukemic B cells of a 70-year-old Caucasian man with CLL at the time of diagnosis staged as Rai II	[2]
HS-5	Established from a 30-year-old Caucasian healthy man	[3]
M2-10B4	Derived from bone marrow stromal cells from a (C57BL/6J X C3H/HeJ)F1 mouse	[4]

References

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