**Table S1**

| Patient ID | miRNA array qPCR | miRNA single qPCR | mRNA array | qPCR | Kinetic expression miRNA/mRNA qPCR | Cryo/Fresh | Percentage Lymphocytes | Percentage CD19/CD5 before selection (% from lymphocytes) | Percentage CD19 after selection (mean 3h and 24h for both A and M) |
|---|---|---|---|---|---|---|---|---|---|
| CLL-1 | | ■ | | ■ | | Cryo | 85 | 81 | 99,3 |
| CLL-2 | ■ | ■ | ■ | ■ | | Cryo | 92 | 92 | 99,5 |
| CLL-3 | ■ | ■ | ■ | ■ | | Cryo | 89 | 96 | 99,0 |
| CLL-4 | | ■ | | ■ | | Cryo | 90 | 99 | 99,2 |
| CLL-5 | | ■ | | ■ | | Fresh | 63 | 82 | 99,1 |
| CLL-6 | ■ | ■ | | ■ | | Fresh | 76 | 88 | 99,4 |
| CLL-7 | ■ | ■ | | ■ | | Fresh | 73 | 62 | 99,2 |
| CLL-8 | ■ | ■ | ■ | ■ | | Cryo | 46 | 36 | 98,2 |
| CLL-9 | ■ | ■ | ■ | ■ | | Fresh | 76 | 94 | 98,7 |
| CLL-10 | ■ | ■ | | ■ | | Fresh | 83 | 93 | 98,5 |
| CLL-11 | ■ | ■ | | ■ | | Fresh | 71 | 98 | 98,3 |
| CLL-12 | ■ | ■ | ■ | ■ | | Cryo | 98 | ND | 98,6 |
| CLL-13 | | ■ | | ■ | | Cryo | 77 | 87 | 98,2 |
| CLL-14 | | | | ■ | ■ | Cryo | 86 | 90 | ND |
| CLL-15 | | | | ■ | ■ | Cryo | 69 | 96 | ND |
| CLL-16 | | | | ■ | ■ | Cryo | 75 | 93 | ND |
| CLL-17 | | | | ■ | ■ | Cryo | 88 | 97 | ND |
| CLL-18 | | | | ■ | ■ | Cryo | 96 | 94 | ND |
| CLL-19 | | | | ■ | ■ | Cryo | 97 | 99 | ND |
| CLL-20 | | | | ■ | ■ | Cryo | 76 | 94 | ND |
| CLL-21 | | | | ■ | ■ | Cryo | 91 | 97 | ND |

Use of samples, according to patient identity (ID). miRNA array qPCR: genome wide combined PCR array using pooled primers in reverse transcription; miRNA single PCR: qPCR using specific reverse transcription primer, mRNA array: genome wide Illumina mRNA array, qPCR: real-time PCR for genes as indicated in text and Fig. 1 and Fig. S1, Kinetic expression miRNA/mRNA qPCR:

real-time PCR for mRNA of genes shown in Fig. 1A and for miRNA shown in Fig. 6.  Fresh/Cryo: indicates whether cells were used fresh upon blood sampling or after cryopreservation of mononuclear fraction, Percentage of lymphocytes: in mononuclear fraction in flow cytometry, Percentage of CD19/CD5 before selection: percentage of double positive CD19+CD5+ cells in of lymphocytes in mononuclear fraction, Percentage CD19+ after selection: percentage of CD19+ cells after enrichment from lymphocytes in mononuclear fraction.