

Patients with chronic lymphocytic leukemia and complex karyotype show an adverse outcome even in absence of *TP53/ATM* FISH deletions

Supplementary Materials

Supplementary Table 1: Baseline characteristics of 1045 CLL and MBL patients at diagnosis and last follow-up

| Patients characteristics | |
|---|----------------|
| Median age at diagnosis (range) | 68 (27–94) |
| Male | 632 (60.5%) |
| Diagnosis | |
| MBL | 224 (21.4%) |
| CLL | 821 (78.6%) |
| Binet stage (<i>n</i> = 802) | |
| A | 685 (85.4%) |
| B | 89 (11.1%) |
| C | 28 (3.5%) |
| Lymphadenopathy (<i>n</i> = 1021) | 316 (31.0%) |
| Splenomegaly (<i>n</i> = 1014) | 65 (6.4%) |
| Hepatomegaly (<i>n</i> = 1032) | 38 (3.7%) |
| Absolute white blood cell count ($\times 10^9/L$) | 15 (3–177) |
| Absolut lymphocyte count ($\times 10^9/L$) | 10 (1–170) |
| Hemoglobin (g/dL) | 14 (5–18) |
| Platelets ($\times 10^9/L$) | 195 (10–555) |
| Lactate dehydrogenase (IU/L) | 310 (81–1548) |
| Beta-2 Microglobulin (mg/L) | 2.1 (1.0–19.0) |
| ZAP-70 positive (<i>n</i> = 501)* | 170 (31.3%) |
| CD38 positive (<i>n</i> = 836)* | 174 (20.8%) |
| Unmutated <i>IGHV</i> (<i>n</i> = 98) | 33 (33.7%) |
| FISH | |
| 13q deletion | 475 (45.4%) |
| Trisomy 12 | 190 (18.2%) |
| 11q deletion (<i>ATM</i>) | 93 (8.9%) |
| 17p deletion (<i>TP53</i>) | 90 (8.6%) |
| Median follow-up (months) | 46 (0–272) |
| Therapy during follow-up | 316 (30.2%) |
| Number of treatments | 1 (1–8) |
| Died during follow-up | 167 (16.0%) |

*Positivity was considered when ZAP-70 > 20% and CD38 > 30%. Values are given as median (range) or number (%). Hemoglobin is expressed as mean (range).

Supplementary Table 2: Most frequently administered therapies in first-line treatment

| Therapy | Frequency |
|--|------------------|
| Chlorambucil | 31.9% |
| Rituximab + fludarabine + cyclophosphamide | 18.3% |
| Fludarabine + cyclophosphamide (\pm mitoxantrone) | 8.7% |
| Fludarabine | 4.6% |
| R-CHOP | 3.2% |
| Bendamustine + Rituximab | 2.3% |

R-CHOP: *rituximab + cyclophosphamide + Adriamycin + vincristine + prednisone*.

Supplementary Table 3: Karyotype result and *ATM/TP53* status from the 99 patients with CK.
See Supplementary_Table_3