**Supplementary Table S1.** Flow cytometry antibody panel.

|  |  |  |  |
| --- | --- | --- | --- |
| **Fluorochrome** | **Marker** | **Clone** | **Brand** |
| FITC | TCR Vß  | various | Beckman Coulter |
| PE | TCR Vß  | various | Beckman Coulter |
| Alexa Fluor 700 | Granzyme B | GB11 | BD Pharmingen |
| APC-H7 | CD3 | SK7  | BD Pharmingen |
| V500 | CD14 | M5E2 | BD Horizon |
| V500 | CD19 | HIB19 | BD Horizon |
| BV650 | CD8 | RPA-T8 | BD Horizon |
| BV786 | CD4 | SK3 | BD Horizon |
| BV421 | PD1 | EH12.1 | BD Horizon |

**Supplementary Table S2.** Baseline clinicobiological features of patients with CLL.

|  |  |  |  |
| --- | --- | --- | --- |
| **Characteristics** | **Total** **n=26** | **Sustained response****n=14** | **PD****n=12** |
| Male, N (%) | 15 (57.7) | 9 (64.3) | 6 (50.0) |
| Age, median (range) | 65 (56 - 82) | 65 (56 - 82) | 67 (59 - 79) |
| Rai stage 3-4, N (%) | 17 (65.4) | 9 (64.3) | 8 (66.7) |
| B2M mg/L, median (range) | 4.3(1.7 - 9.0) | 3.55(1.70 - 8.60) | 5.15(3.20 - 9.00) |
| IGHV unmutated, N (%)  | 17 (65.4) | 9 (64.3) | 8 (66.7) |
| WBC x109/L, median (range) | 81.55 (3.75 - 406.82) | 83.81 (3.75 - 214.73) | 66.93(3.76 - 406.82) |
| Lymphocyte count x109/L, median (range) | 75.97(2.79 - 401.94) | 78.77(2.78 - 208.29) | 65.13(3.17 - 401.94) |
| CD19+ count x109/L, median (range) | 71.42(0.74 - 393.50) | 74.48(0.74 - 202.87) | 61.66(1.06 - 393.50) |
| CD3+ count x109/L, median (range) | 2.97(0.65 - 18.75) | 2.63(1.66 - 7.37) | 3.38(0.65 - 18.75) |
| CD4+ T-cells count x109/L, median (range) | 1.70(0.44 - 6.97) | 1.71(0.87 - 3.48) | 1.70(0.44 - 6.97) |
| CD8+ T-cells count x109/L, median (range) | 1.14(0.19 - 11.36) | 1.04(0.57 - 3.48) | 1.50(0.19 - 11.36) |
| CD4+/CD8+, median (range) | 1.36(0.32 - 4) | 1.41(0.78 - 3.00) | 1.24(0.32 - 4.00) |
| FISH categories | del(17p), N (%) | 19 (73.1) | 9 (64.3) | 10 (83.3) |
| trisomy 12, N (%) | 3 (11.5) | 1 (7.1) | 2 (16.7) |
| del(11q), N (%) | 2 (7.7) | 2 (14.3) | 0 (0) |
| del(13q), N (%) | 2 (7.7) | 2 (14.3) | 0 (0) |
| Treatment naïve, N (%) | 15 (57.7) | 12 (85.7) | 3 (25.0) |