

CHRONIC LYMPHOPROLIFERATIVE DISORDERS CLPD

T cell lymphoma

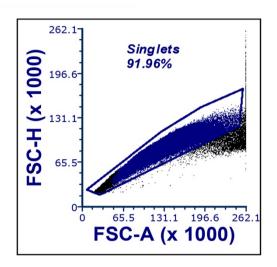


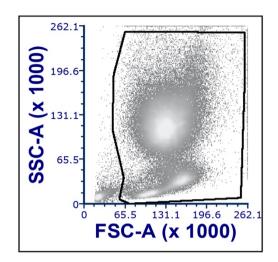
Flow Cytometry is an essential tool for the diagnostic screening of CLPD, and for specific identification and characterization of the expanded aberrant lymphocytes, for accurate diagnosis and classification of mature lymphoid malignancies (B, T and NK CLPD)

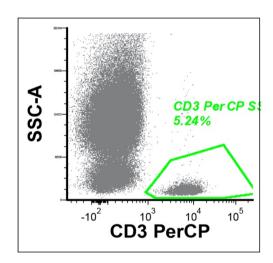
Example of T-cell lymphoproliferative disorder consistent with Peripheral T-cell lymphoma (PTCL), not further classified.

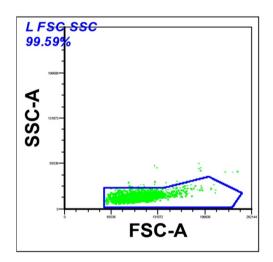
Example of Vbeta analysis of this case is also included.

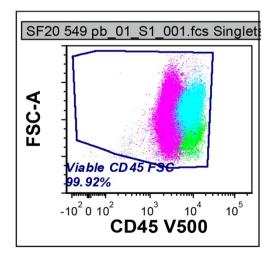
INITIAL GATING

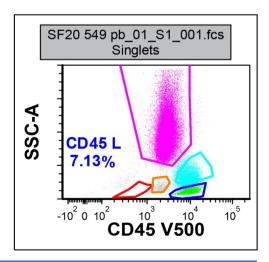






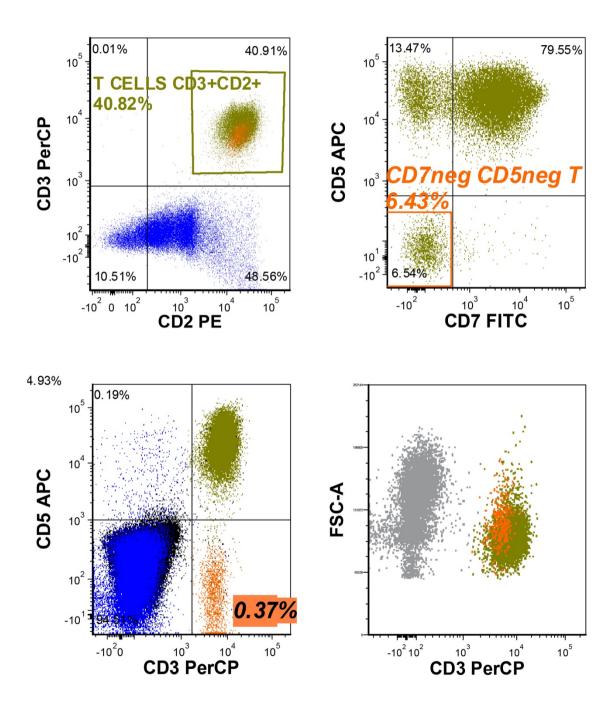




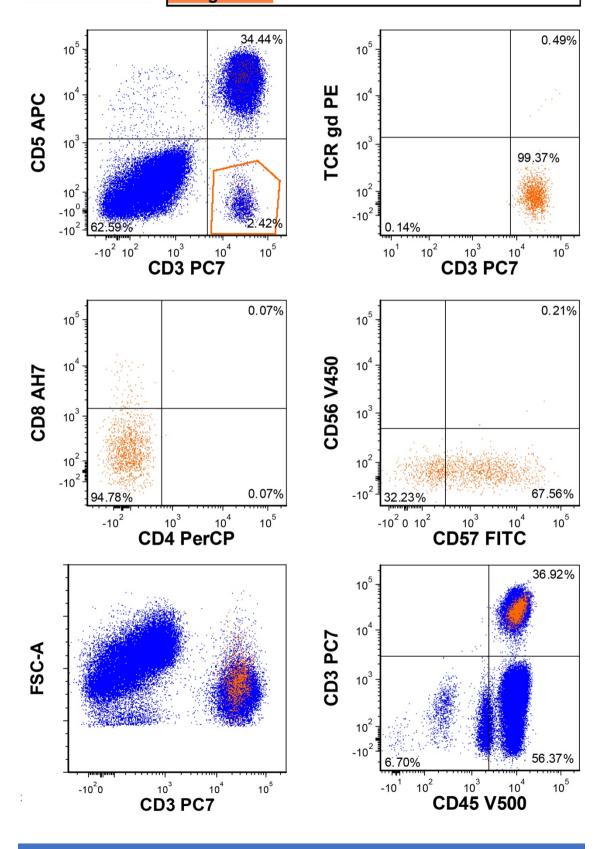


IDENTIFICATION OF ABNORMAL T CELLS: CD3+ CD2+ CD7neg CD5neg

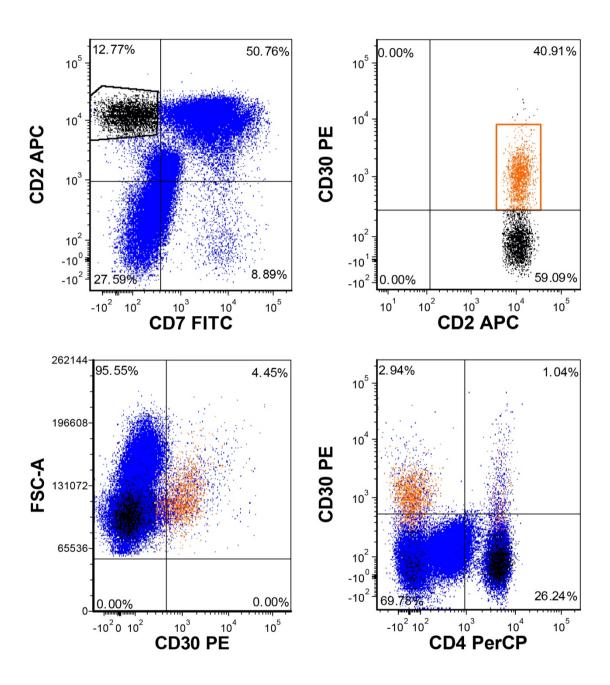
6.43% of total T cells 2.81% of total lymphocytes 0.37% of total viable cells

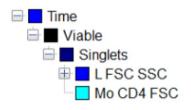


CHARACTERIZATION OF ABNORMAL T CELLS: CD45++ CD4NEG CD8NEG CD56neg CD57+v TCR gd NEG



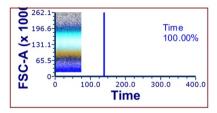
CHARACTERIZATION OF ABNORMAL T CELLS: CD30+, intermediate size

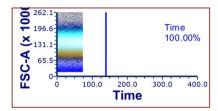


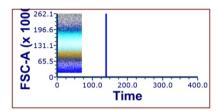


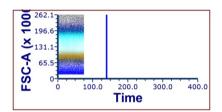
VBeta Panel
Data List (8 tubes):

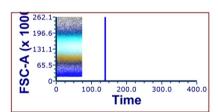
- 1 Vb Mix A
- 2 Vb Mix B
- 3 Vb Mix C
- 4 Vb Mix D
- 5 Vb Mix E
- 6 Vb Mix F
- 7 Vb Mix G
- 8 Vb Mix H

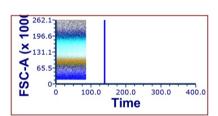


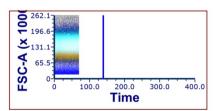


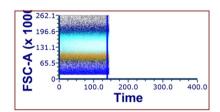


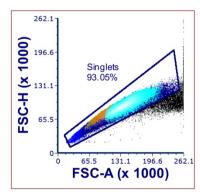


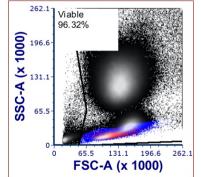


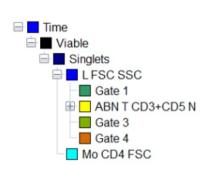


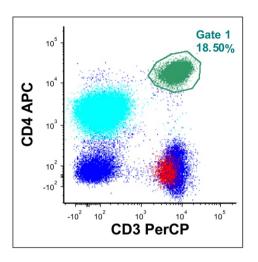










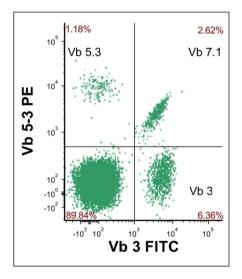


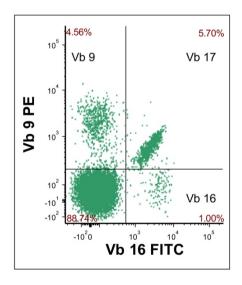
V BETA TEST - ANALYSIS STRATEGY

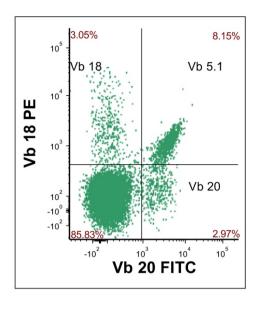
The initial T lymphocyte analysis demonstrated a cluster of abnormal T cells, that express CD3 but are negative for CD5, CD4 and CD8.

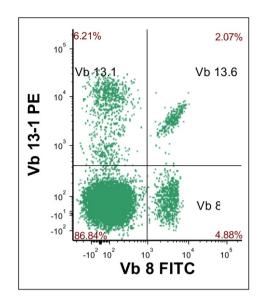
An additional analysis was performed to determine T-cell clonality based on the expression of different Vbeta families of the T-cell receptor (TcR) on these abnromal cells using a broad panel of 24 anti-Vbeta monoclonal antibodies.

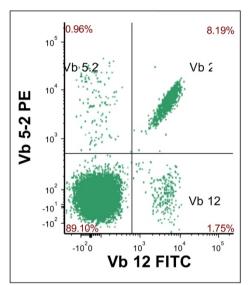
While the phenotypically normal T cells (GATE 1 on CD4+T cells, GATE 3 on CD5+ T cells and GATE 4 on CD8+ T cells) showed a normal Vbeta family expression distribution, 99% of the abnormal cells (GATE 2) demonstrated expression of Vbeta 3, that confirms a clonal T-cell expansion.

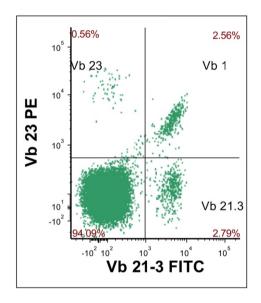


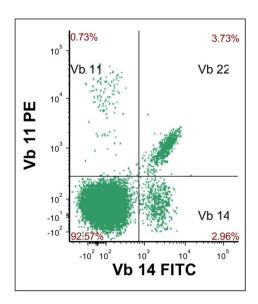


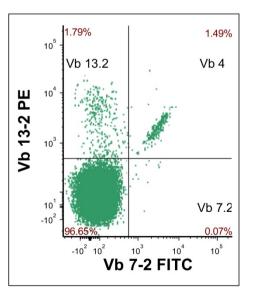




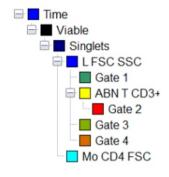


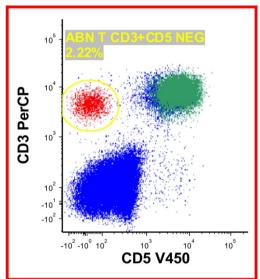


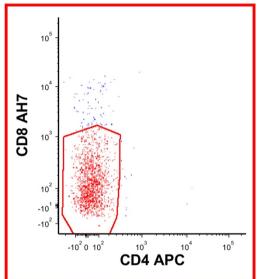


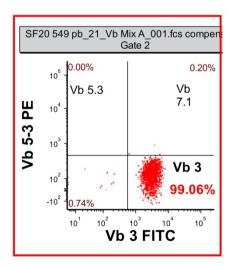


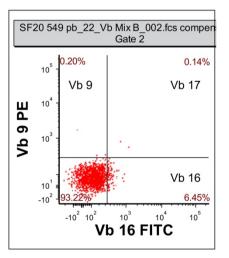
| Vbeta | % |
|--------|-------|
| Gate 1 | |
| 5.3 | 1.18 |
| 7.1 | 2.62 |
| 3 | 6.36 |
| 9 | 4.56 |
| 17 | 5.70 |
| 16 | 1.00 |
| 18 | 3.05 |
| 5.1 | 8.15 |
| 20 | 2.97 |
| 13.1 | 6.21 |
| 13.6 | 2.07 |
| 8 | 4.88 |
| 5.2 | 0.96 |
| 2 | 8.19 |
| 12 | 1.75 |
| 23 | 0.56 |
| 1 | 2.56 |
| 21.3 | 2.79 |
| 11 | 0.73 |
| 22 | 3.73 |
| 14 | 2.96 |
| 13.2 | 1.79 |
| 4 | 1.49 |
| 7.2 | 0.07 |
| Total | 76.33 |

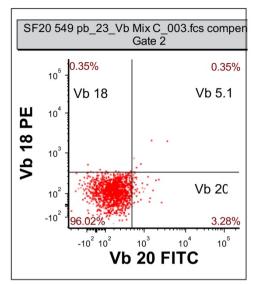


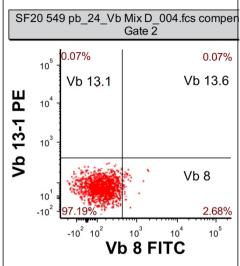


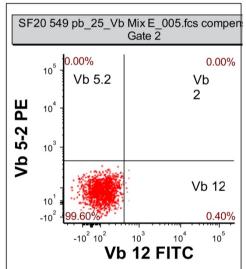


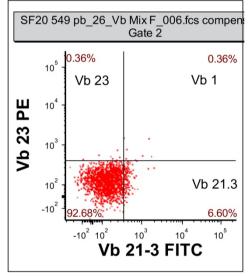


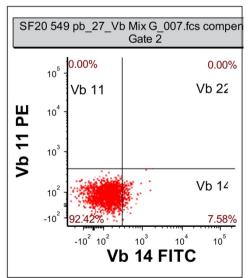


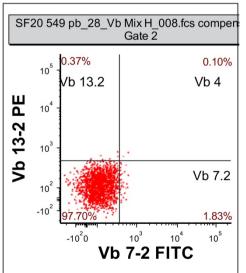












| Vbeta | % |
|--------|--------|
| Gate 2 | |
| 5.3 | 0.00 |
| 7.1 | 0.20 |
| 3 | 99.06 |
| 9 | 0.20 |
| 17 | 0.14 |
| 16 | 6.45 |
| 18 | 0.35 |
| 5.1 | 0.35 |
| 20 | 3.28 |
| 13.1 | 0.07 |
| 13.6 | 0.07 |
| 8 | 2.68 |
| 5.2 | 0.00 |
| 2 | 0.00 |
| 12 | 0.40 |
| 23 | 0.36 |
| 1 | 0.36 |
| 21.3 | 6.60 |
| 11 | 0.00 |
| 22 | 0.00 |
| 14 | 7.58 |
| 13.2 | 0.37 |
| 4 | 0.10 |
| 7.2 | 1.83 |
| TOTAL | 130.45 |

