

## SUPPLEMENTARY TABLE

**Supplementary Table 1: Biological and clinical characteristics of the patients in study.**

<b>Characteristic</b>	<b>Tγδ LGLL cohort</b>
Gender Male	76/136 (55.9%)
Age at diagnosis – years	
Mean ± SD	57.5 ± 14.6
Median [min; max]	58.5 [18; 92]
Age>65 years	40/136 (29.4%)
LGL>2,000/mm <sup>3</sup>	24/109 (22.0%)
CD4 expression	3/102 (2.9%)
CD8 expression	64/105 (61.0%)
CD8+/- expression	23/105 (21.9%)
CD8- expression	41/105 (39.1%)
CD16 expression	73/101 (72.3%)
CD56 expression	32/103 (31.1%)
CD57 expression	80/102 (78.4%)
KIR expression	23/56 (41.1%)
CD158a expression	8/56 (14.3%)
CD158b expression	13/56 (23.2%)
CD158e expression	5/56 (8.9%)
CD94 expression	32/75 (42.7%)
NKG2A expression	12/54 (22.2%)
NKG2C expression	3/30 (10.0%)
STAT3 mutated	37/97 (38.1%)
STAT5b mutated	4/94 (4.8%)
ANC<1,500/mm <sup>3</sup>	65/120 (54.2%)
ANC<500/mm <sup>3</sup>	25/120 (20.8%)
Hb<120 g/L	59/119 (49.6%)
Hb<90 g/L	25/119 (21.0%)
PLTs<100,000/mm <sup>3</sup>	18/119 (15.1%)
Splenomegaly	31/122 (21.4%)
Autoimmune/inflammatory diseases	49/118 (41.5%)
Secondary primary malignancies	17/84 (20.2%)
Need for treatment	58/108 (53.7%)

Abbreviations. KIR: Killer Immunoglobulin-like Receptor. ANC: Absolute Neutrophils' Count. Hb: Hemoglobin. PLTs: platelets.

**Supplementary Table 2: Comparison of T $\gamma\delta$  LGLL and T $\alpha\beta$  LGLL survival curves by RMST analysis.**

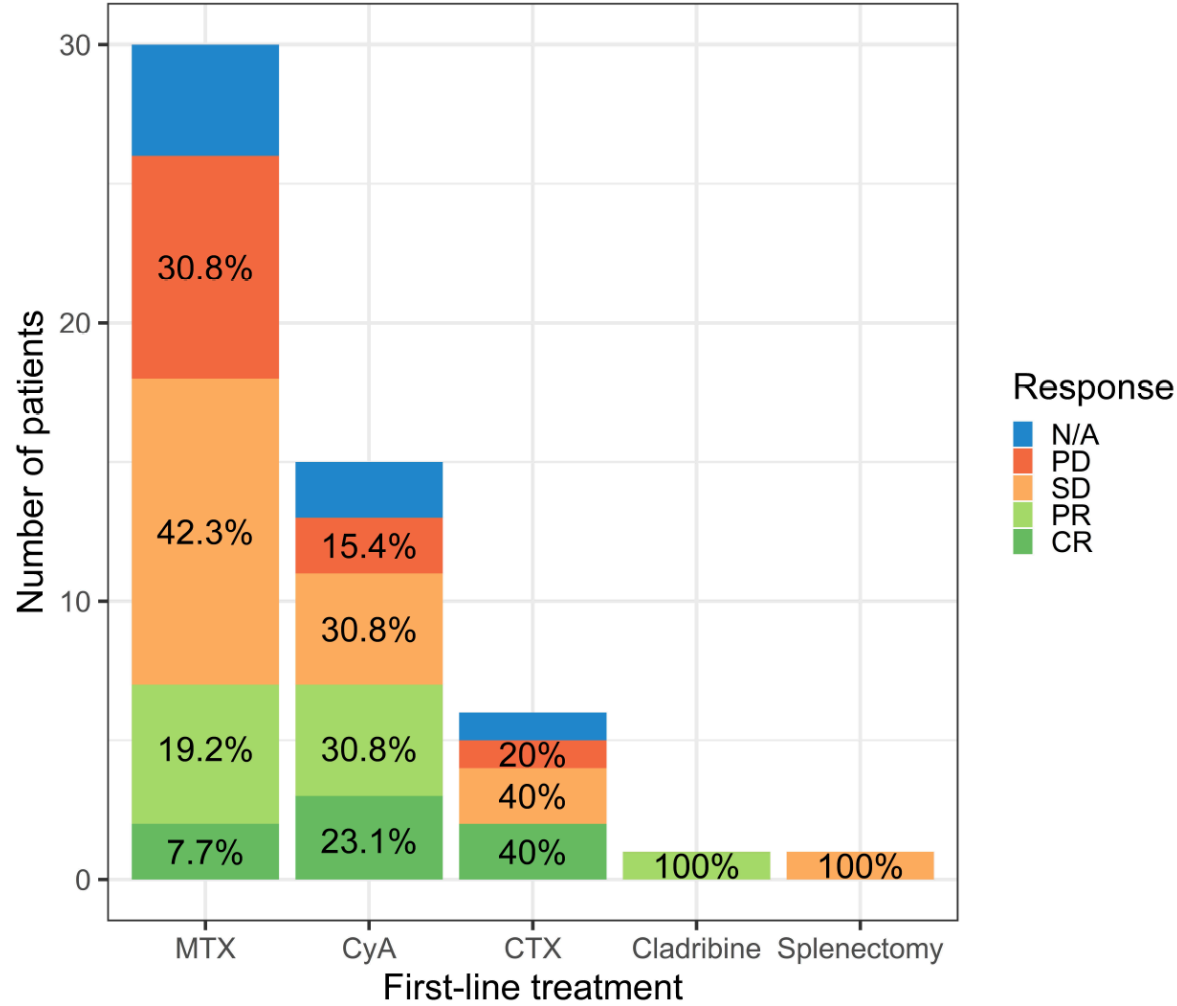
Four different truncation time points for the RMST calculation were evaluated (100, 120, 140 and 160 months) in order to compare the results and guarantee that the size of the risk set is large enough at the specified truncation time. As an example of interpretation, the point estimate of the [RMST(T $\gamma\delta$ ) – RMST(T $\alpha\beta$ )] contrast at the truncation time point of 120 months indicated that T $\gamma\delta$  LGLL patients survive 11.5 months shorter than T $\alpha\beta$  LGLL patients on average, when following up the patients for 10 years. The 95% CI was (-19.5; -3.6) with a statistical significance of p=0.004.

Truncation time point	RMST(T $\gamma\delta$ ) – RMST(T $\alpha\beta$ )	95% CI	P
100 months	-8.9	(-14.8; -3.0)	0.003
120 months	-11.5	(-19.5; -3.6)	0.004
140 months	-13.8	(-23.9; -3.6)	0.008
160 months	-16.7	(-29.5; -4.0)	0.010

*Abbreviations. RMST: restricted mean survival time. CI: confidence interval.*

SUPPLEMENTARY FIGURES

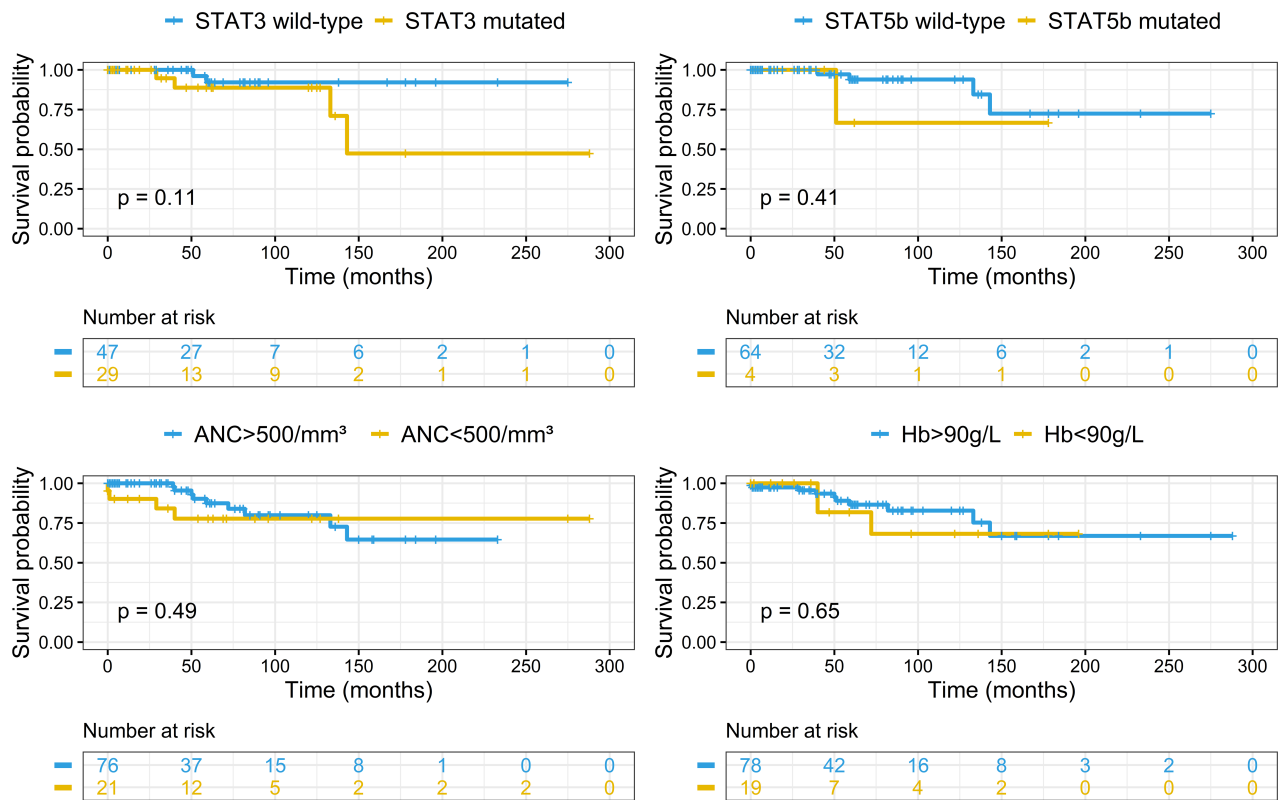
Supplementary Figure 1



**Supplementary Figure 1: Treatment response rates.**

Bar chart representing the response rates to first line treatment in Tγδ LGLL patients. The first-line treatment is shown on the x-axis. The number of treated patients is indicated on the y-axis. Percentages in the bars refer to different types of response, according to the color legend on side. MTX: Methotrexate. CyA: Cyclosporine A. CTX: Cyclophosphamide. N/A: response not available. PD: progressive disease. SD: stable disease. PR: partial response. CR: complete response.

## Supplementary Figure 2



### Supplementary Figure 2: Overall survival of Tγδ LGLL patients.

Overall survival of Tγδ LGLL patients according to A) *STAT3* mutated status B) *STAT5b* mutated status C) presence of severe neutropenia D) presence of severe anemia.

Kaplan-Meier curves of overall survival were compared using the log-rank test.