

Prolonged Cytopenias in Autologous Stem Cell Transplantation in Relapsed/Refractory Diffuse Large B-Cell Lymphoma

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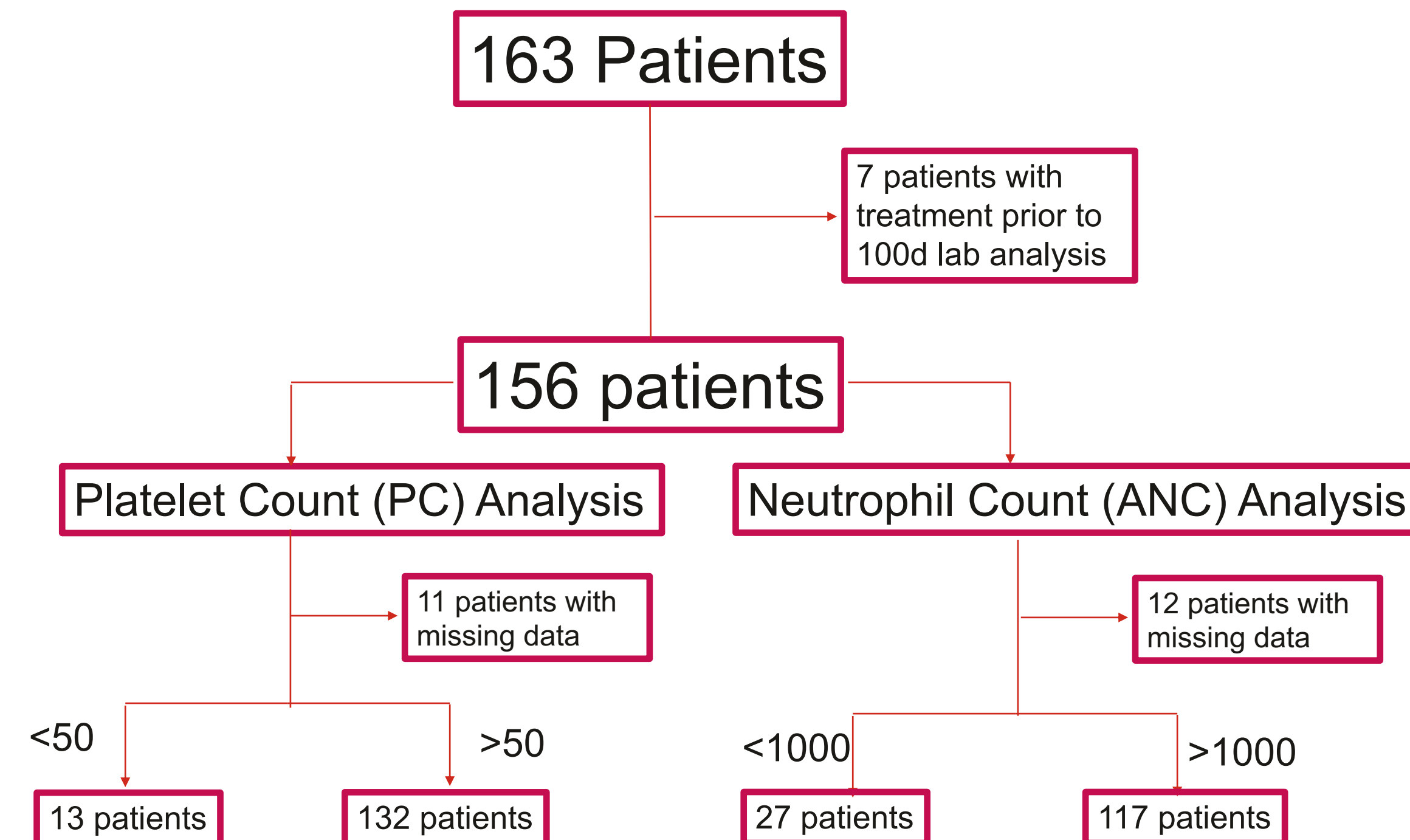
Background

- Autologous Stem Cell Transplantation (ASCT) can cure patients with relapsed/refractory diffuse large B-cell lymphoma (DLBCL)
- These patients often develop prolonged cytopenias that last months after ASCT
- After ASCT, labs are checked routinely at day 100 and at 1 year post-transplant
- The impact of this complication has not been studied

Objective/Hypothesis

- We evaluated whether neutropenia (neutrophil count <1000) or thrombocytopenia (platelet count < 50) were predictors of progression free survival (PFS) or overall survival (OS)
- We hypothesized that patients who experienced prolonged neutropenia or thrombocytopenia would have inferior PFS and OS

Methods



Results

Patient Characteristic	All Patients (N=163) N (%)
Gender	Male – 93 (58.5%)
Race	White – 107 (66%) Non-White – 55 (34%)
Stage	Stage I-II – 30 (21.9%) Stage III-IV – 107 (78.1%)
Presence of Bone Marrow Involvement	Yes – 33 (20.2%) No/Unclear – 130 (79.8%)
ECOG	0 – 8 (4.9%) 1 – 81 (50.0%) 2+ - 73 (45.1%)
Age at Diagnosis	55
Recurrence of Malignancy/Persistent Disease	46 (29.7%)

Results (continued)

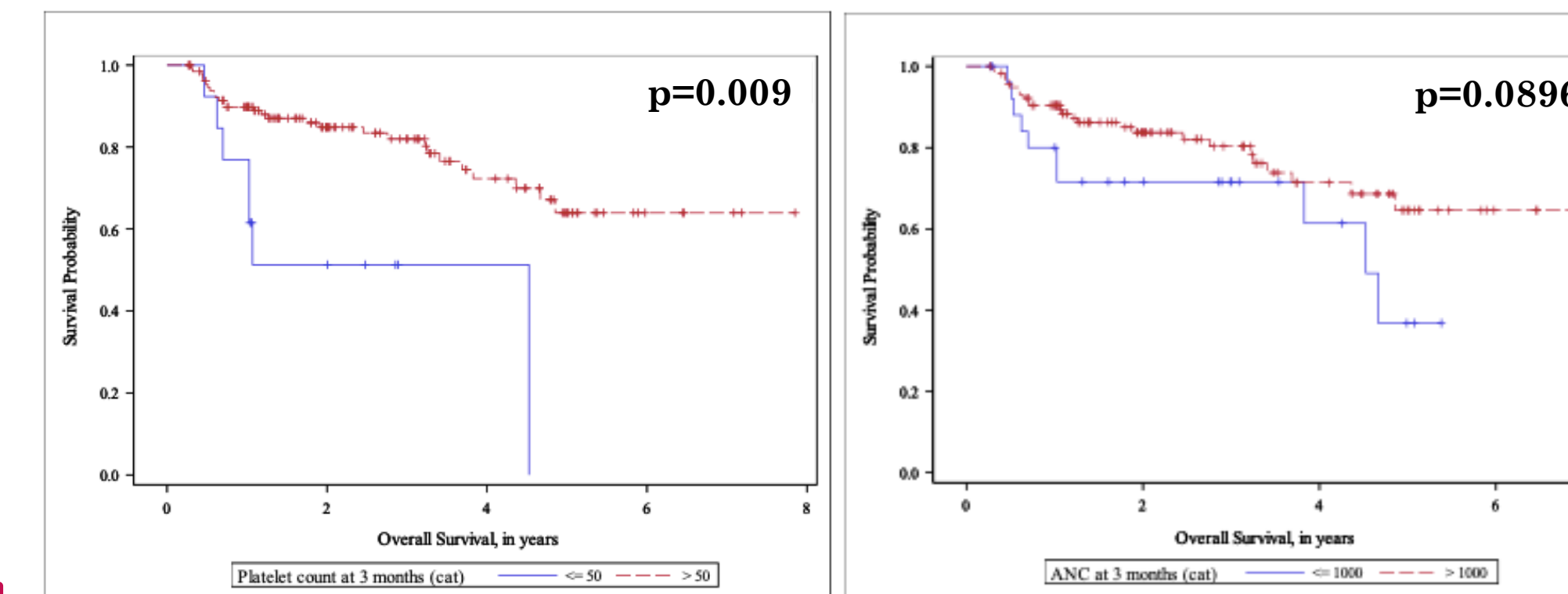


Figure 1: Kaplan-Meier Overall Survival (OS) curves

A: PC < 50 versus PC > 50

B: ANC < 1000 versus ANC > 1000

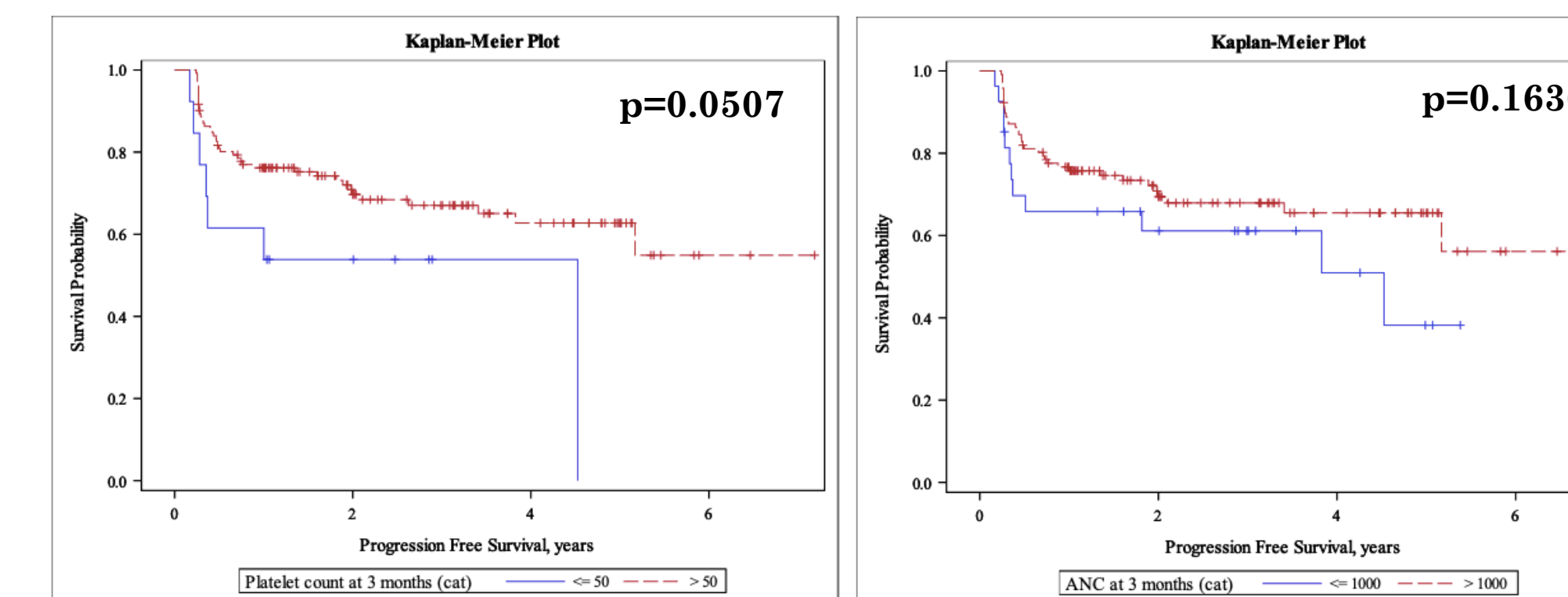


Figure 1: Kaplan-Meier Progression Free Survival (PFS) curves

A: PC < 50 versus PC > 50

B: ANC < 1000 versus ANC > 1000

Discussion

- We found that patients with PC > 50,000 at day 100 labs had improved OS in both univariate and multivariable analyses
- PFS data was not significant
- Patients with improved PC > 50 were less likely to have bone marrow involvement
- ANC predicted neither OS or PFS

Summary

- This was a retrospective cohort study evaluating patients with relapsed/refractory NHL who received ASCT at a single center between 2013-2019
- This study showed that prolonged thrombocytopenia at day 100 lab evaluation was predictive of overall survival
- Analysis of causes of death and inpatient hospital courses might be helpful in future studies