

Prognostic Outcomes of Diffuse Large B-cell Lymphoma Patients with MYC and BCL2 Co-Expression



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INTRODUCTION

Diffuse large B-cell lymphoma (DLBCL) is the most common subtype of non-Hodgkin lymphoma (NHL), accounting for 25-40% of all NHL cases.

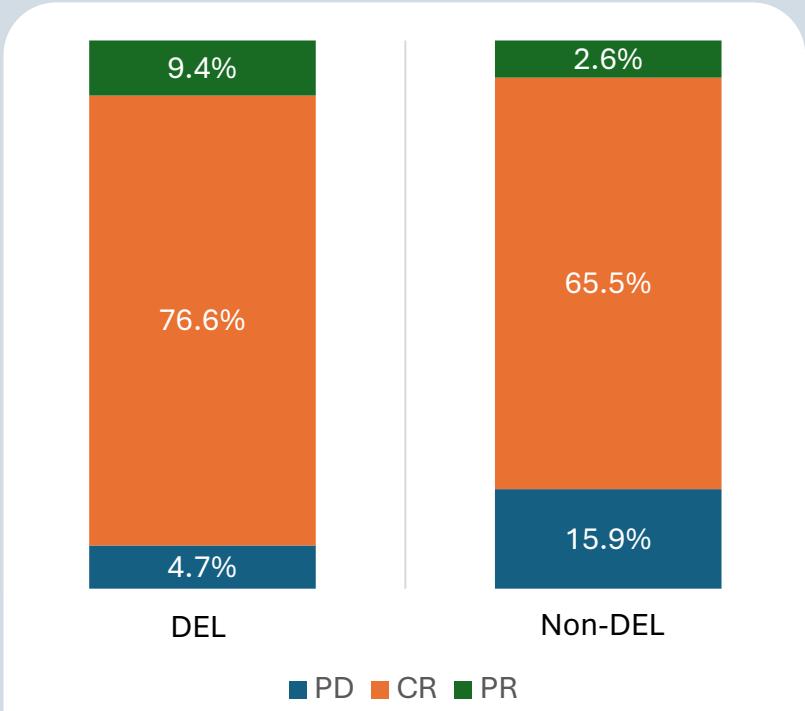
Double-expressor lymphoma (DEL) is characterized by the overexpression of MYC and BCL2 proteins, detected by immunohistochemistry.

DEL is associated with more aggressive disease behavior, higher relapse rates, and worse survival outcomes compared to non-DEL DLBCL. Standard first-line therapy(R-CHOP) has shown limited efficacy in DEL.

RESULTS

Among 177 patients, 113 (63.8%) were DEL and 64 (36.2%) non-DEL. DEL patients had significantly worse outcomes, with a median follow-up of 39.4 months. The 3-year PFS (44.2% vs. 68.8%) and OS (54.9% vs. 81.3%) were significantly lower in DEL (PFS: $p < 0.001$; OS: $p = 0.001$). Median PFS in DEL was 19 months.

Multivariable analysis confirmed DEL as an independent predictor of worse PFS (HR: 1.488, 95% CI: 1.091–2.03, $p = 0.012$) and OS (HR: 1.376, 95% CI: 1.011–1.873, $p = 0.043$).



PD, progressive disease; PR, partial response; CR, complete remission

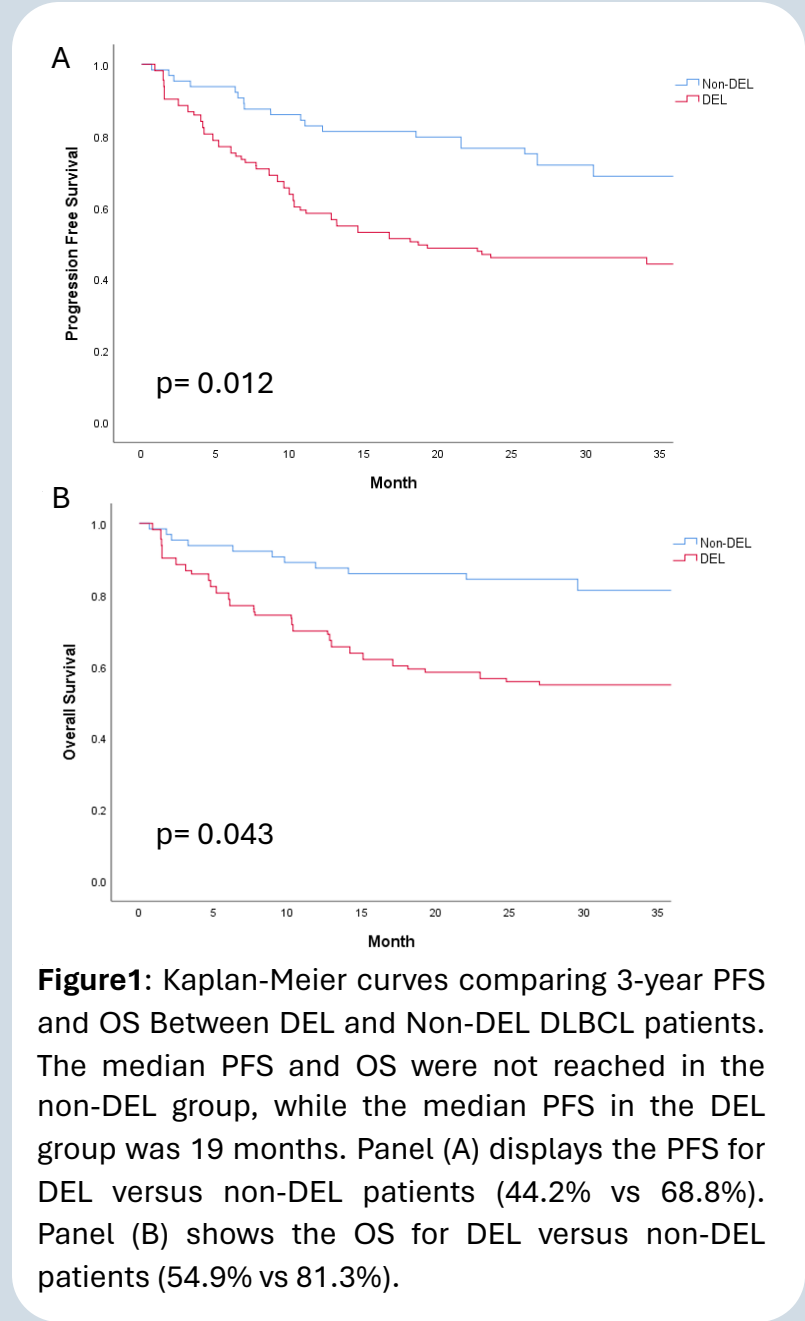
Figure 2: Treatment response rates between DEL versus non-DEL DLBCL patients.

METHOD

- A retrospective single-center study
- 177 DLBCL patients who were diagnosed between March 2014 and March 2021.
- DEL was defined by immunostaining of MYC $\geq 40\%$ and BCL2 $\geq 50\%$.
- Kaplan-Meier survival analysis and Cox proportional hazard models were used to compare PFS and OS between DEL and non-DEL groups.

OBJECTIVE

Assess the impact of DEL on progression-free survival (PFS) and overall survival (OS) compared to non-DEL patients.



CONCLUSION

DEL status is strongly linked to poor survival in DLBCL, highlighting the need for targeted therapies beyond R-CHOP. Future research should explore personalized treatment strategies to improve outcomes in this high-risk group.

References

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