

# Grey Zone Lymphoma

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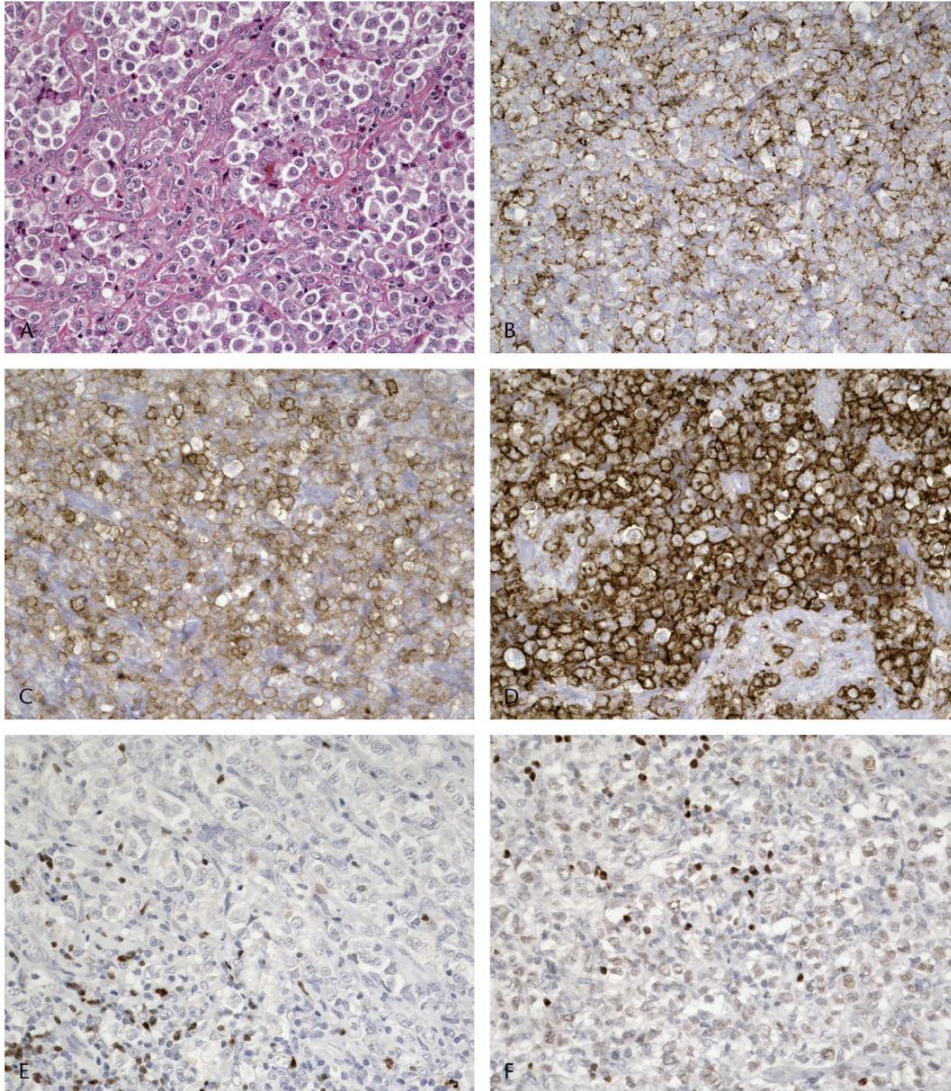
# Disclosures for Stephen Ansell, MD, PhD

*In compliance with ACCME policy, Mayo Clinic requires the following disclosures to the activity audience:*

Research Support/P.I.	PI – SeaGen, BMS, Affimed, Regeneron, AI Therapeutics, Pfizer, AstraZeneca, ADC Therapeutics for clinical trials
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Major Stockholder	N/A
Speakers' Bureau	N/A
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**N/A = Not Applicable (no conflicts listed)**

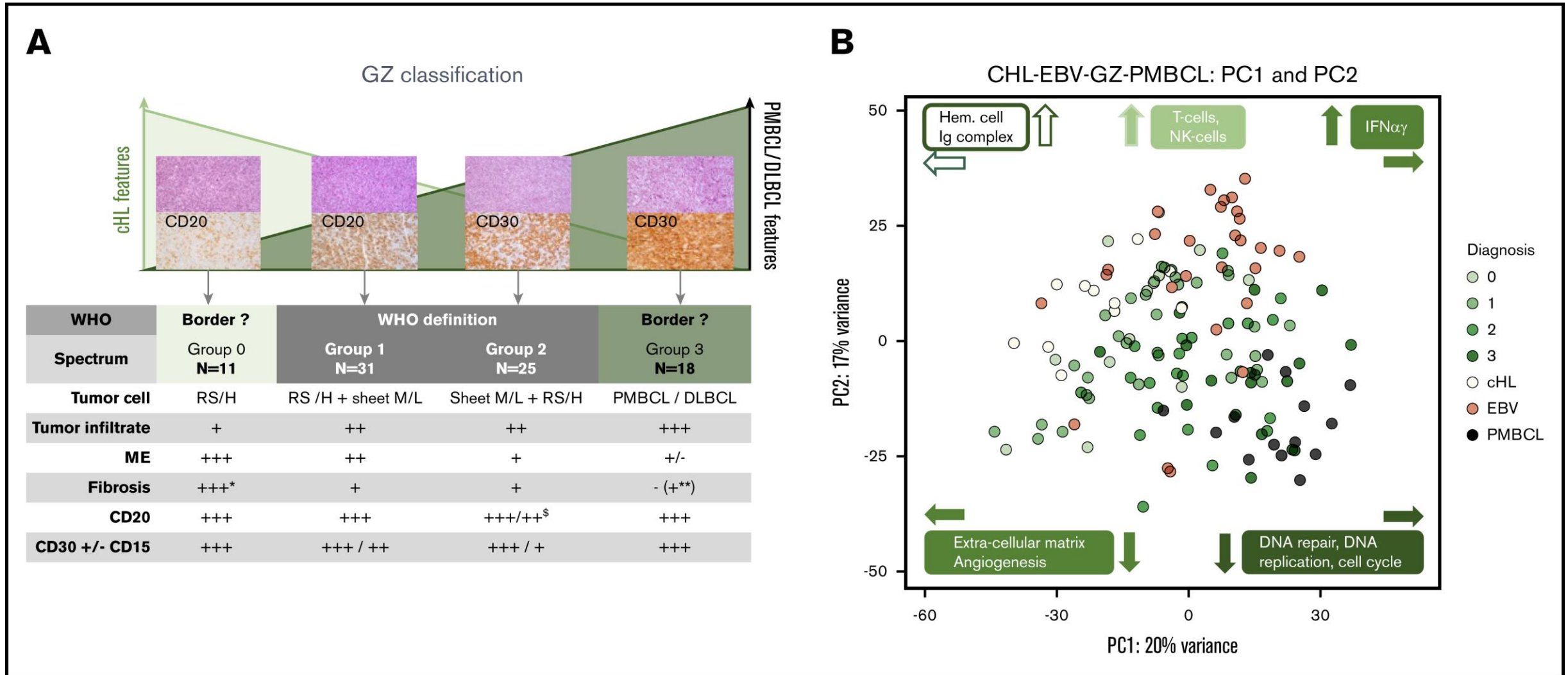
# Gray zone lymphoma: the missing link between classic Hodgkin lymphoma and mediastinal large B-cell lymphoma



Original description –

- A. Large cells with clear cytoplasm
- B. Most cells are CD20+
- C. Tumor cells are CD30+
- D. Strong staining for CD15
- E. B-cells are BOB.1 negative
- F. Pax5 is weak

# Gene expression profiling of gray zone lymphoma

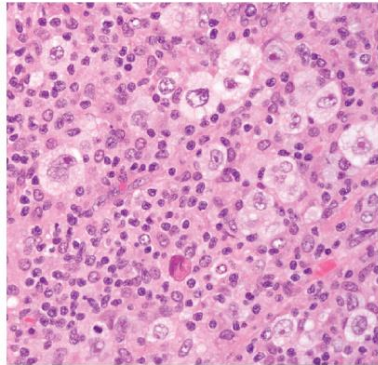


# Gene Expression Profiling of Mediastinal Gray Zone Lymphoma and Its Relationship to Primary Mediastinal B-cell Lymphoma and Classical Hodgkin Lymphoma

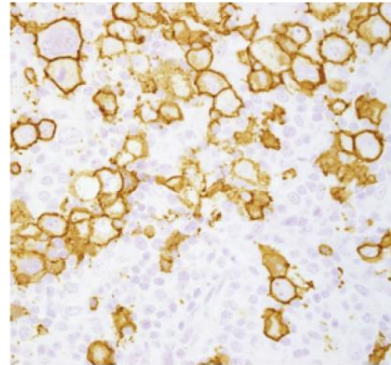
**A**

MGZL cHL-like

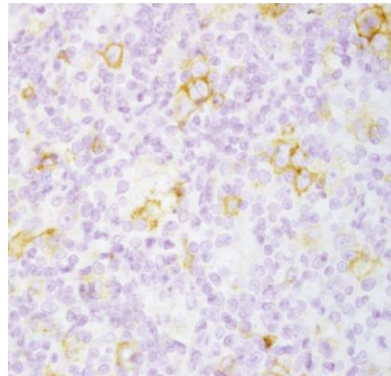
H&E stain



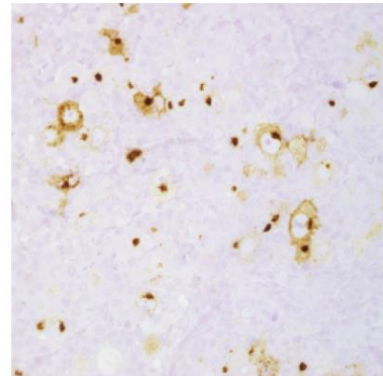
CD20 stain



CD30 stain



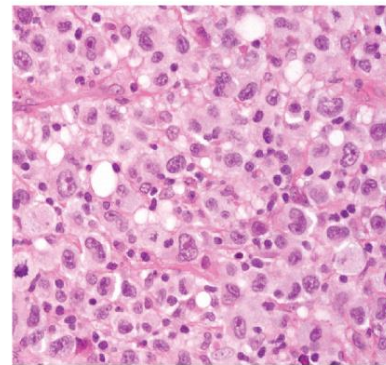
CD15 stain



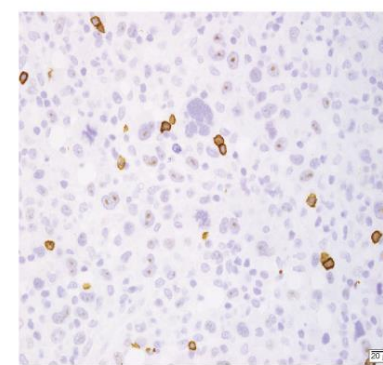
**B**

MGZL PMBL-like

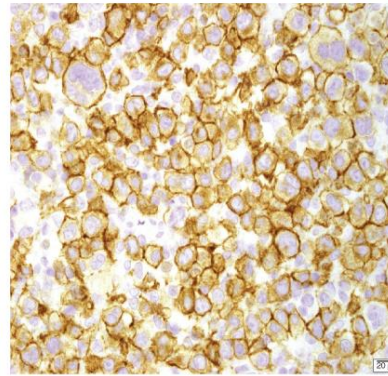
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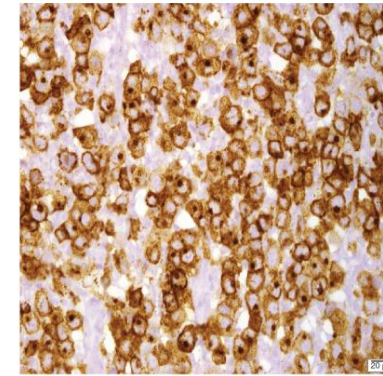
CD20 stain



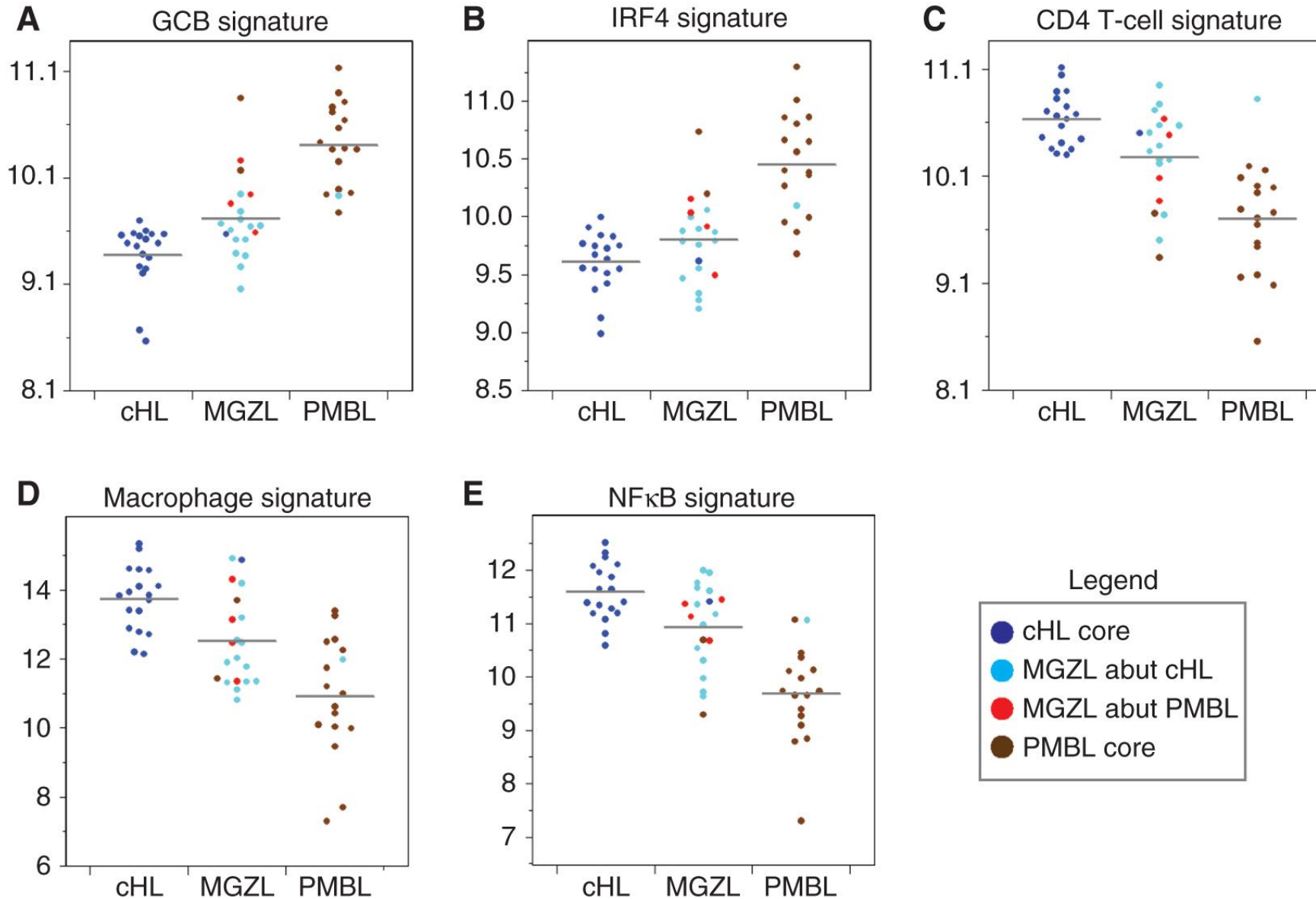
CD30 stain



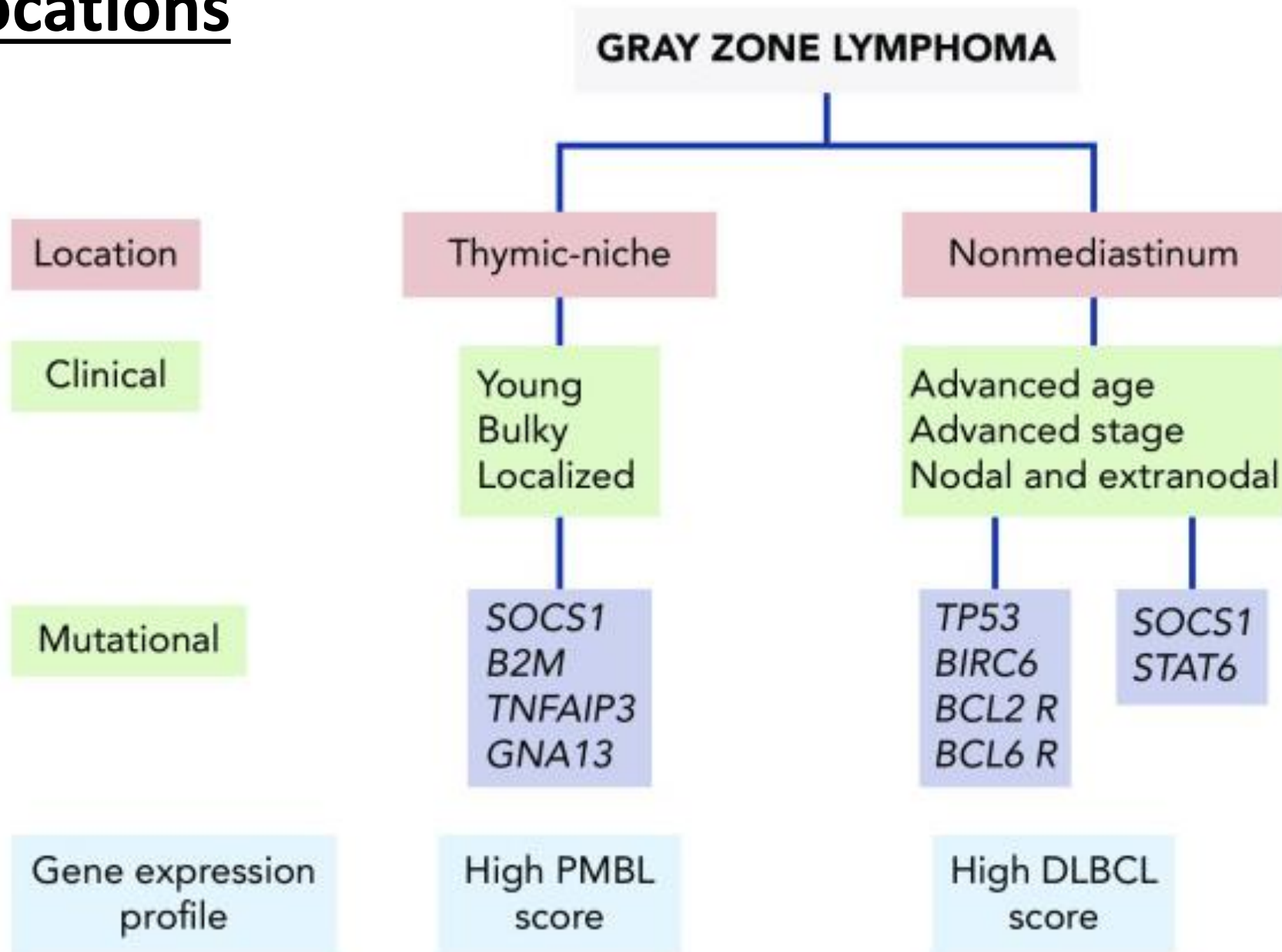
CD15 stain



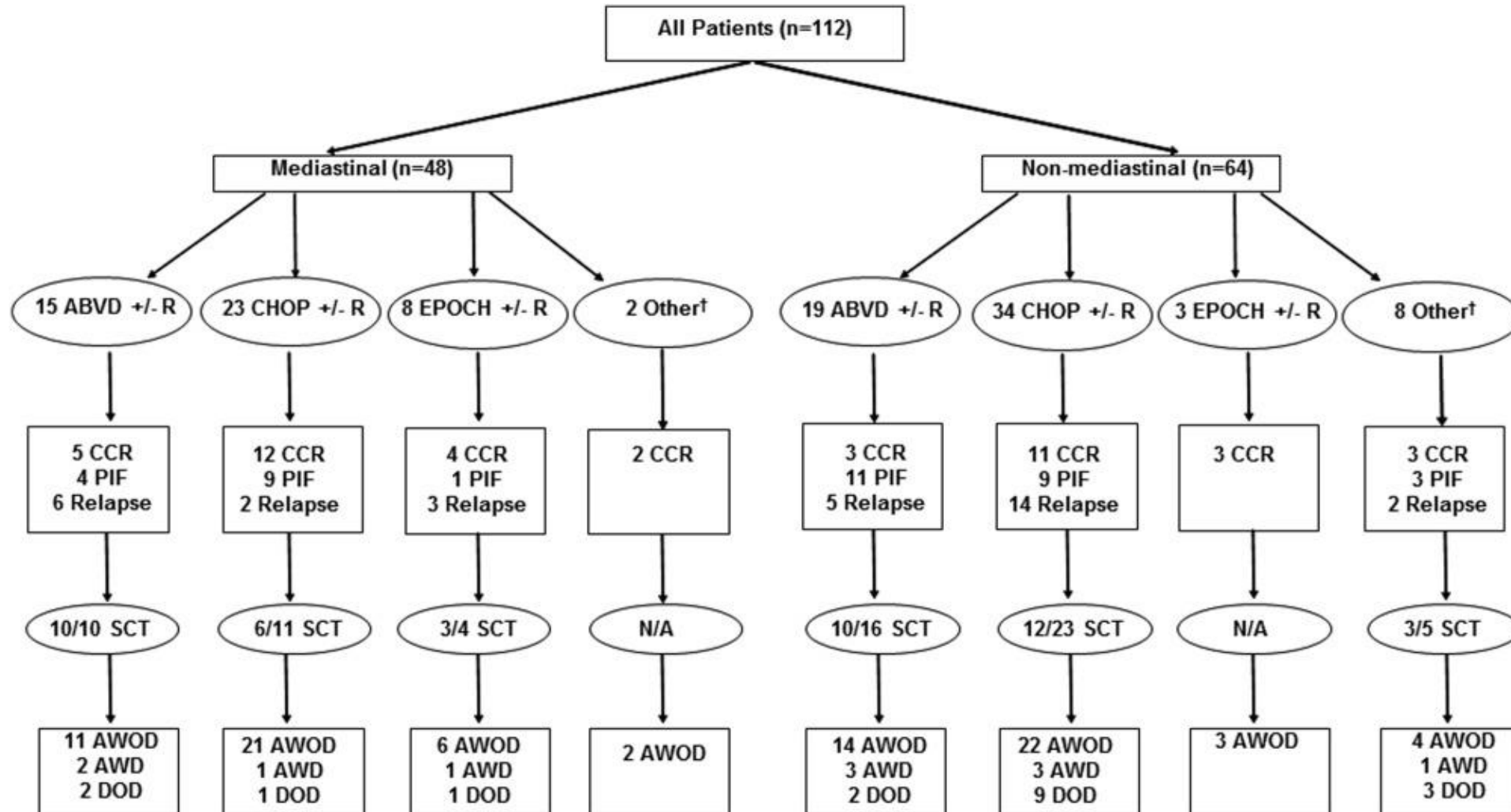
# MGZL, cHL, and PMBL gene expression signatures



# Two locations



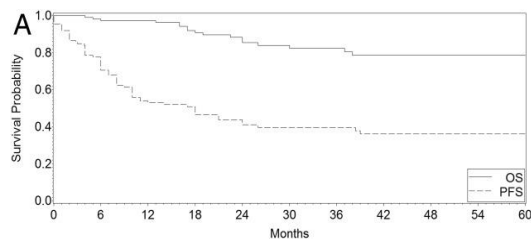
# Gray zone lymphoma : Characteristics, outcomes, and prognostication among a large multicenter cohort



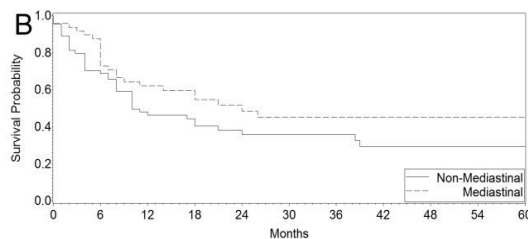


# Gray zone lymphoma : Outcomes

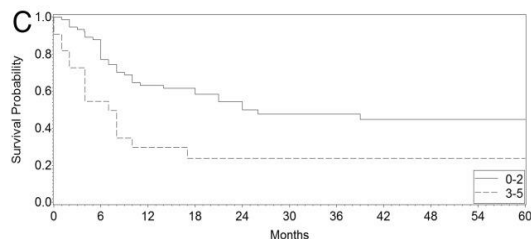
**PFS and OS**



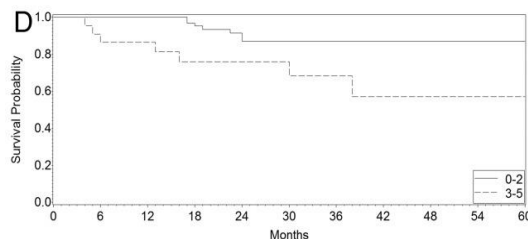
**Mediastinal or not**



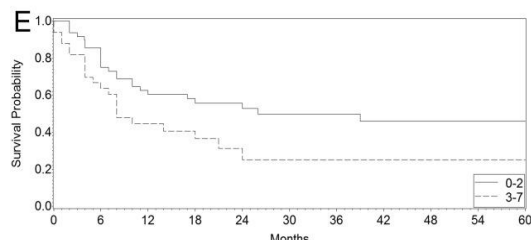
**PFS by IPI  
(DLBCL)**



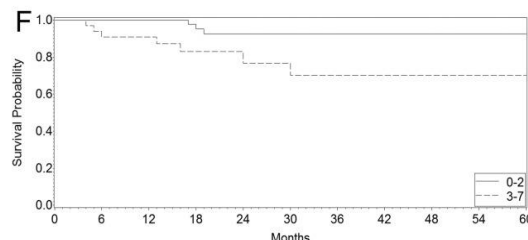
**OS by IPI  
(DLBCL)**



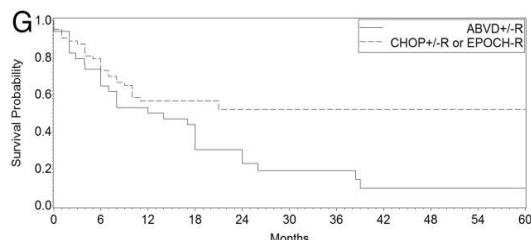
**PFS by IPI  
(HL)**



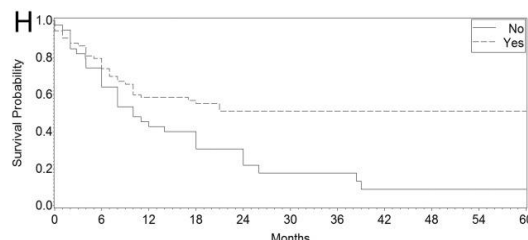
**OS by IPI  
(HL)**



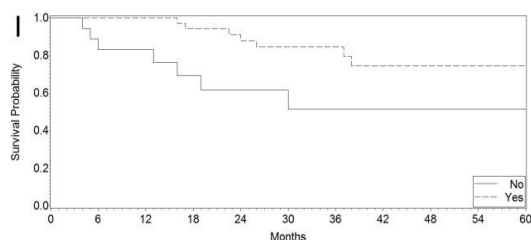
**Treatment  
type**



**Rituximab or  
not**

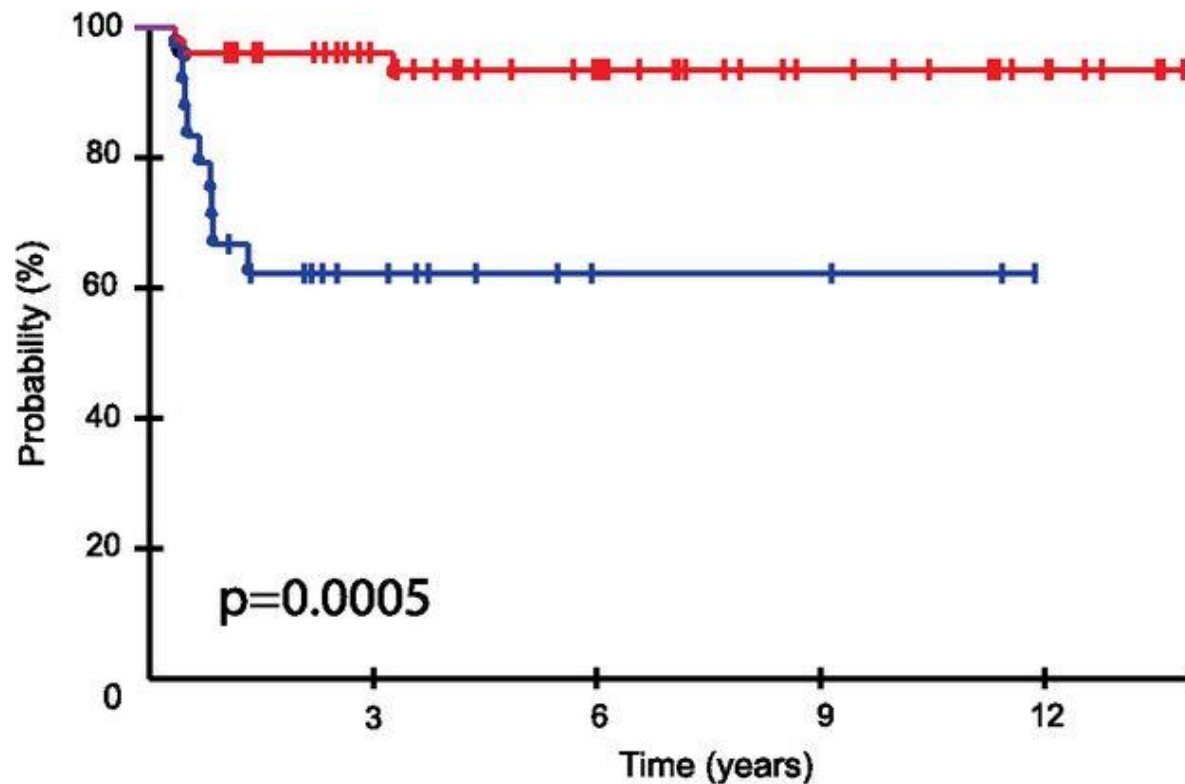


**Transplant or  
not**

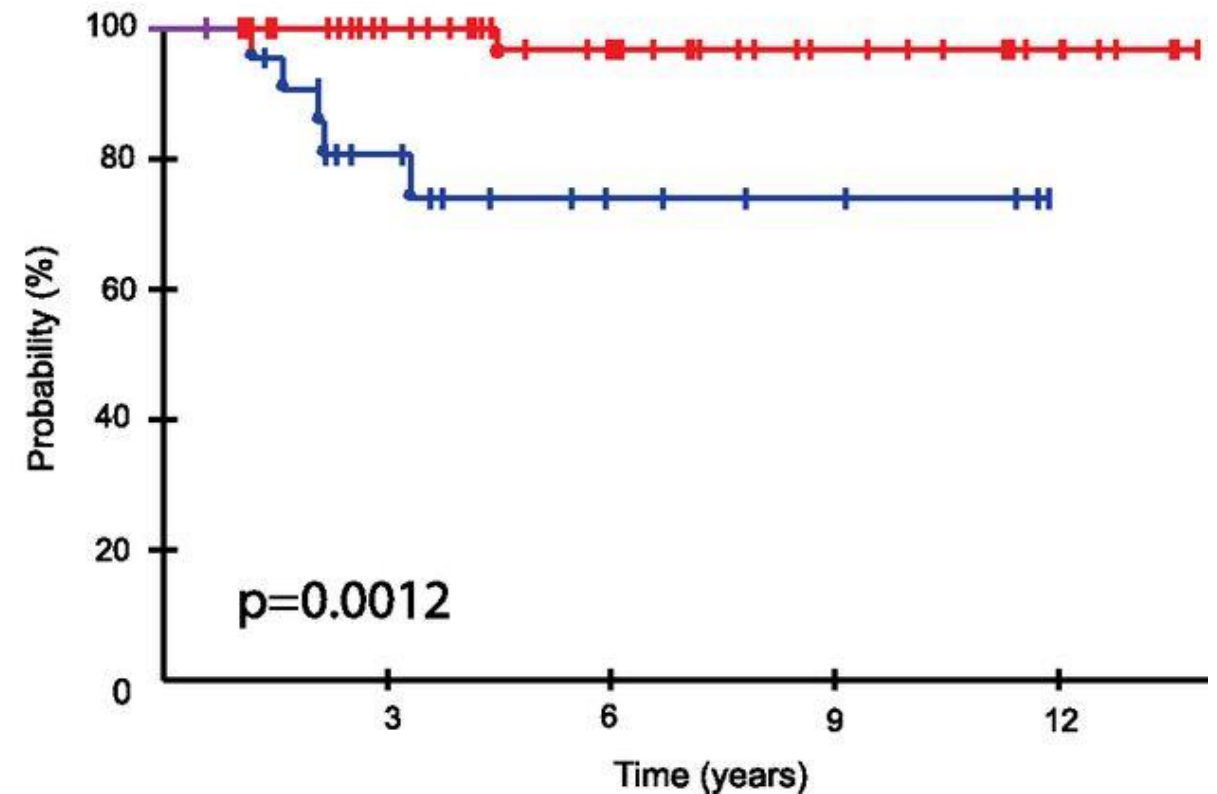


# EFS and OS of MGZL and PMBL treated with DA-REPOCH

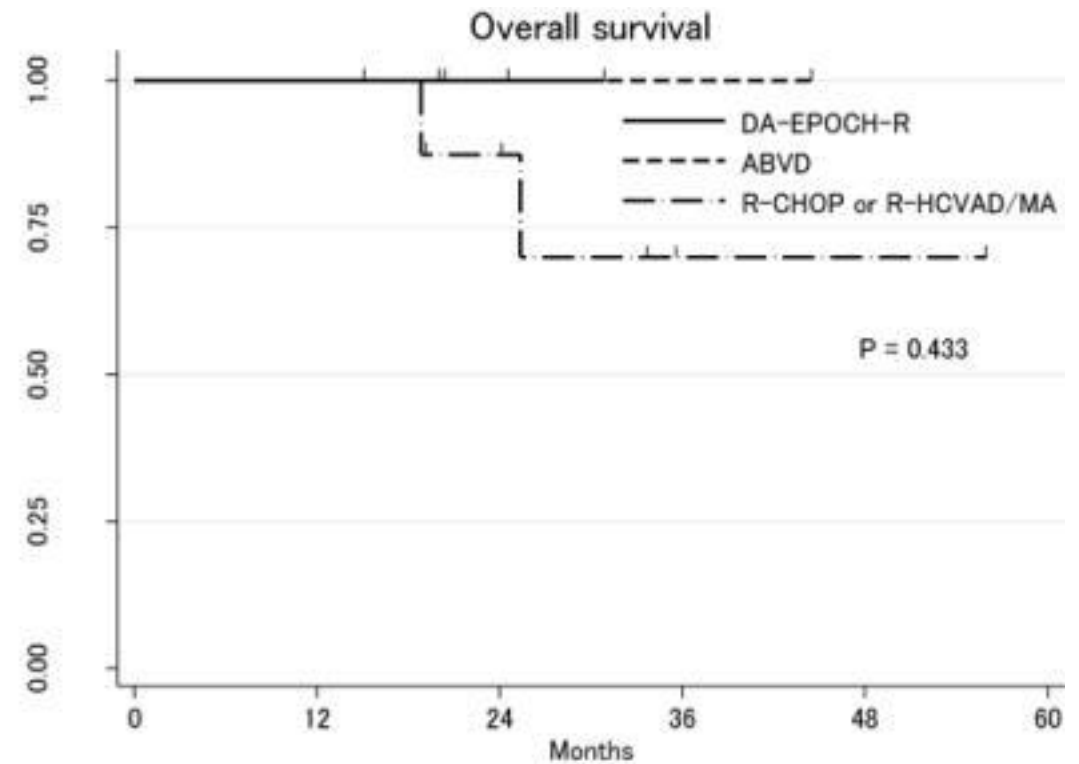
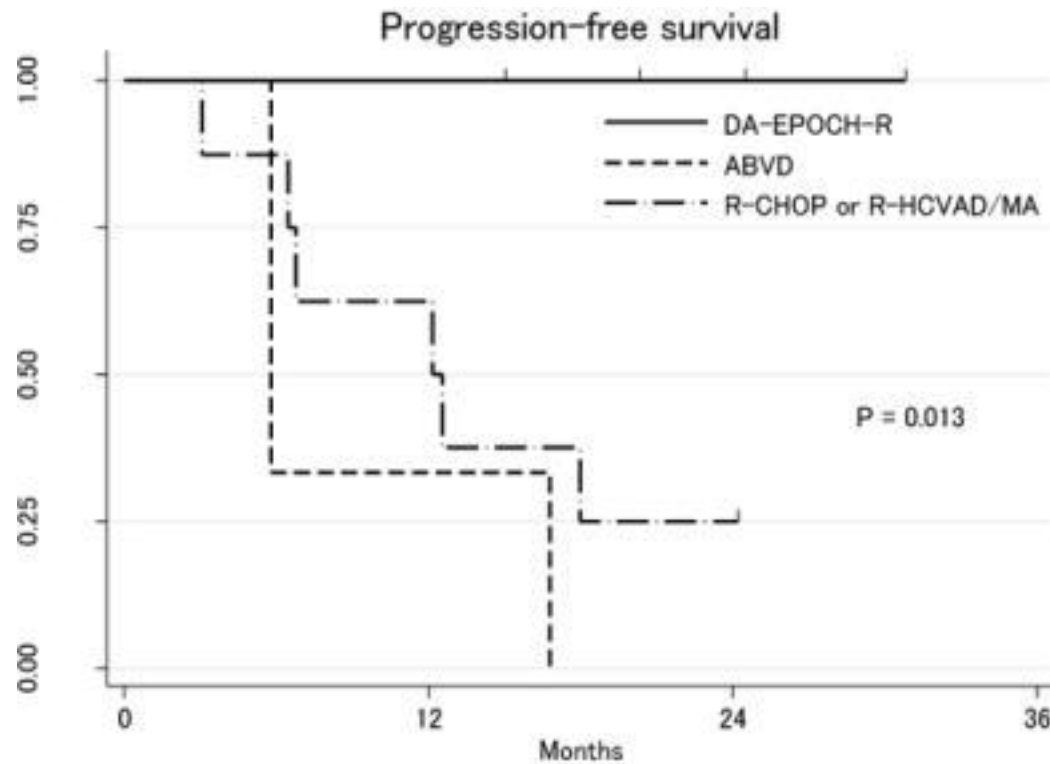
**A** Event-Free Survival (MGZL and PMBL)



**B** Overall Survival (MGZL and PMBL)



# Dose adjusted-EPOCH-R and mediastinal disease may improve outcomes for patients with gray-zone lymphoma



# Treatment Selection and Survival in Patients with Gray Zone Lymphoma: A Comprehensive Population-Based Analysis

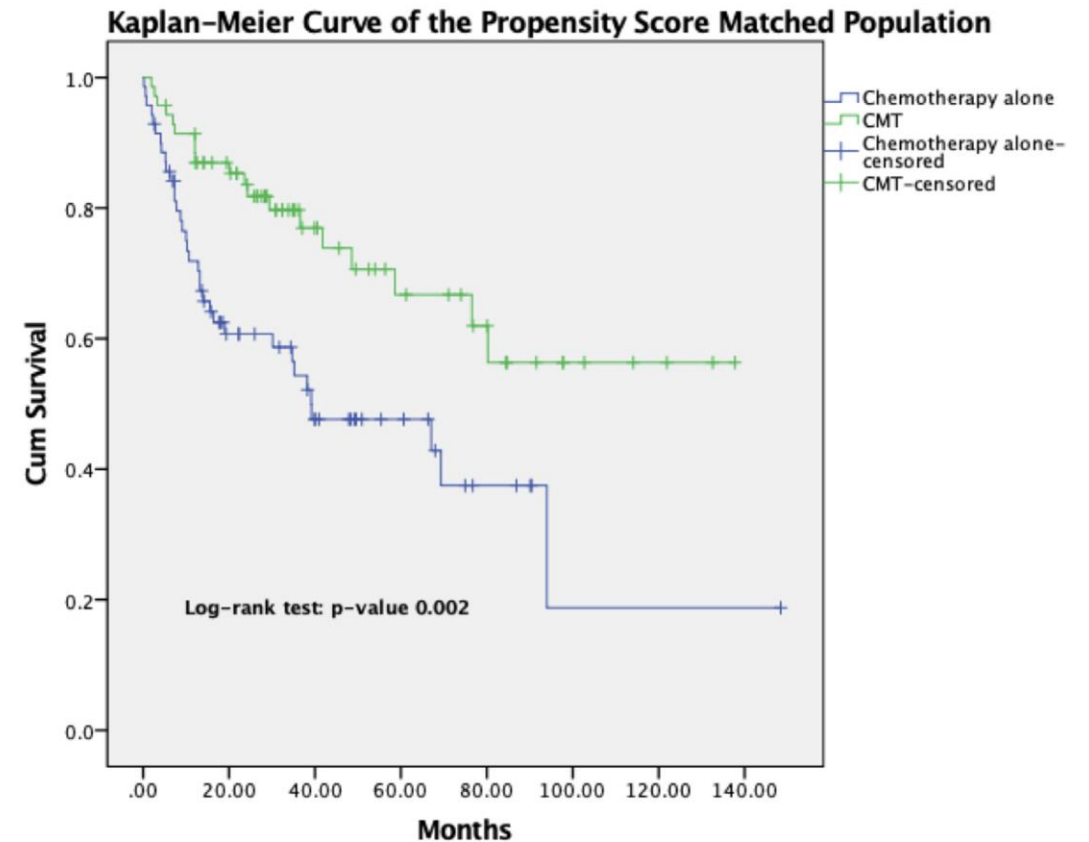
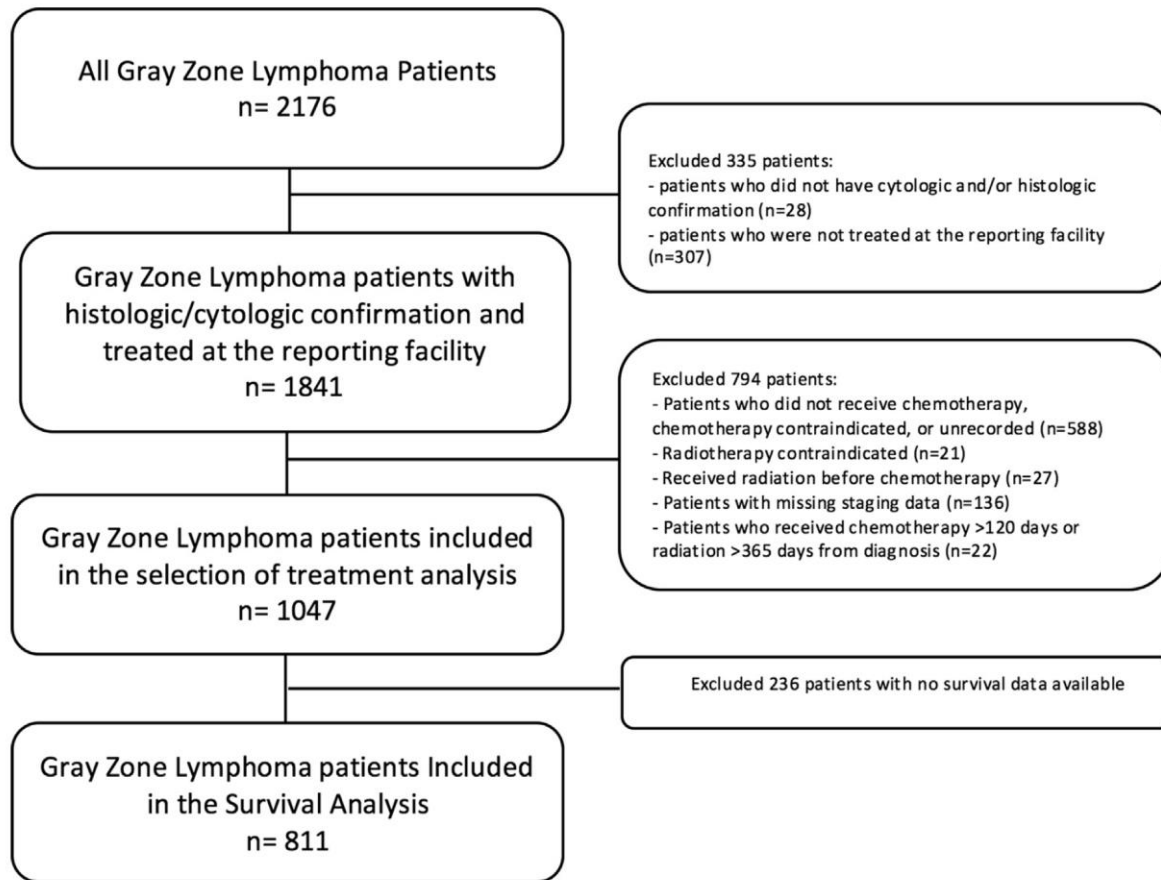


Fig. 2. Kaplan-Meier curve of the propensity score matched population.

## Questions for discussion

- How reliably is the diagnosis of grey zone lymphoma made?
- Should all patients be treated with DA-R-EPOCH?
- What is the role of radiation in patients with mediastinal disease?