

PROGNOSTIC VALUE OF SOLUBLE CD30 AND CD163⁺ TUMOR-ASSOCIATED MACROPHAGES IN RELAPSED CLASSICAL HODGKIN LYMPHOMA: COULD GUIDE TREATMENT CHOICE?

HL- 80

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INTRODUCTION

Brentuximab vedotin (BV) is a standard of care in relapsed classical Hodgkin lymphoma (cHL) alone or in combinations however, resistance to BV is common.

AIM

We hypothesized that circulating soluble CD30 (sCD30) and tumor-associated macrophages (CD163⁺) could detect BV efficacy. Primary endpoint: PET-complete response (CR). Secondary endpoints: eligibility for ASCT, PF and OS.

METHOD

120 relapsed cHL patients (BV naïve) treated with ICE + BV salvage (governmental and insurance support) then planned for ASCT and BV maintenance. Baseline assessments of Serum sCD30 (ELISA) and considered high when ≥ 75 th percentile (>180 U/mL). CD163 macrophage expression in a new tissue biopsy at time of relapse (IHC) and considered high if $\geq 30\%$ macrophage infiltration.

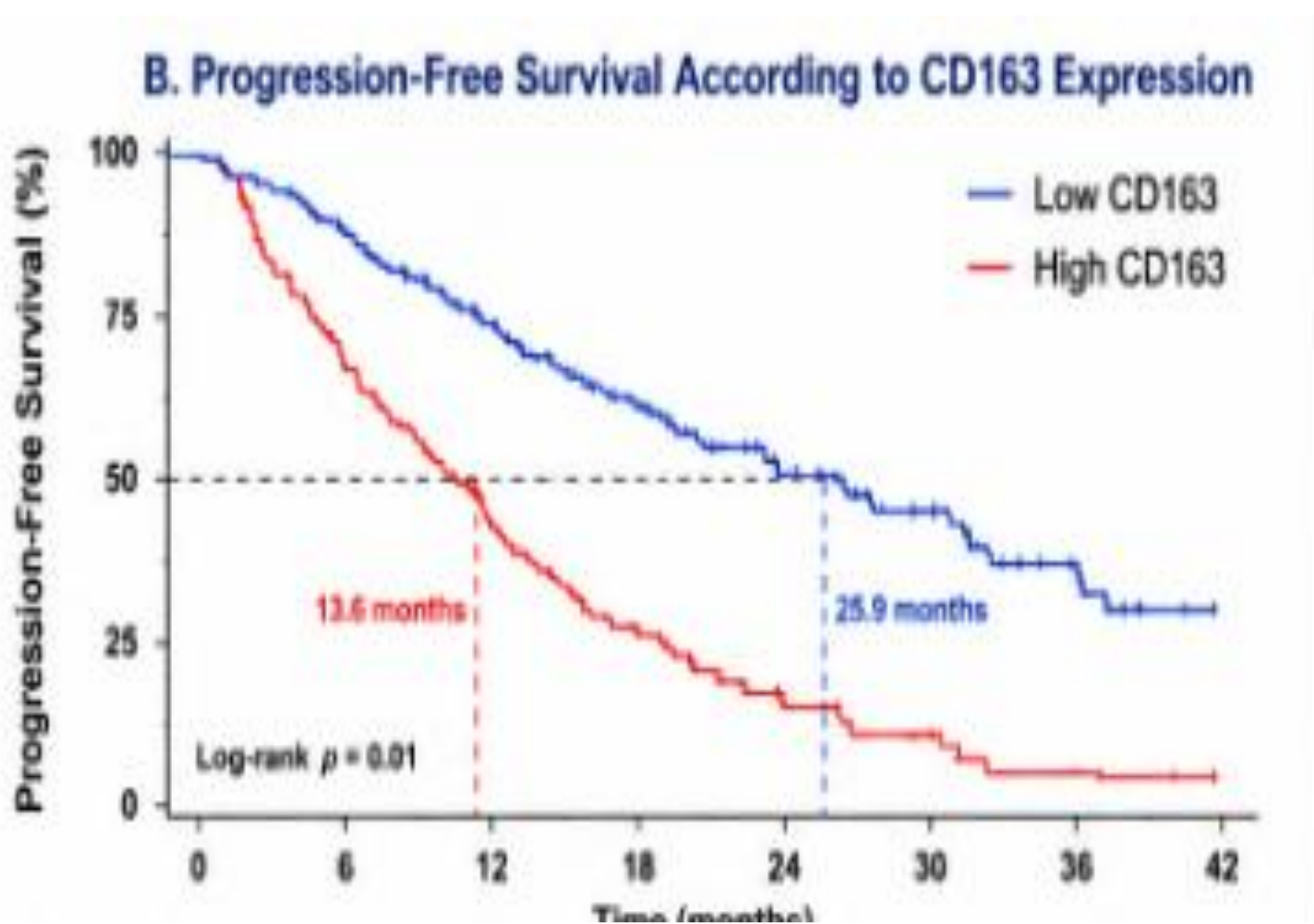
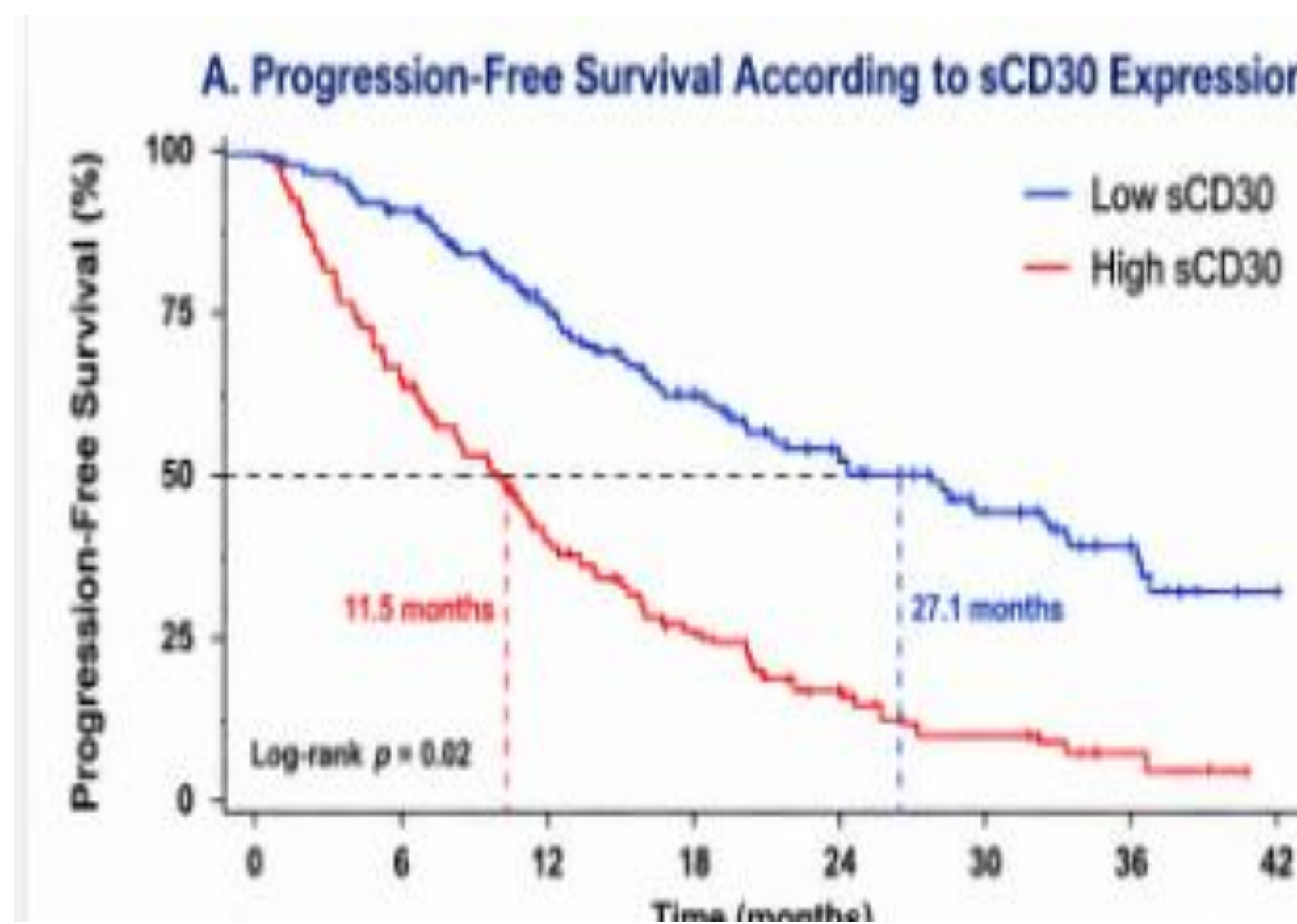
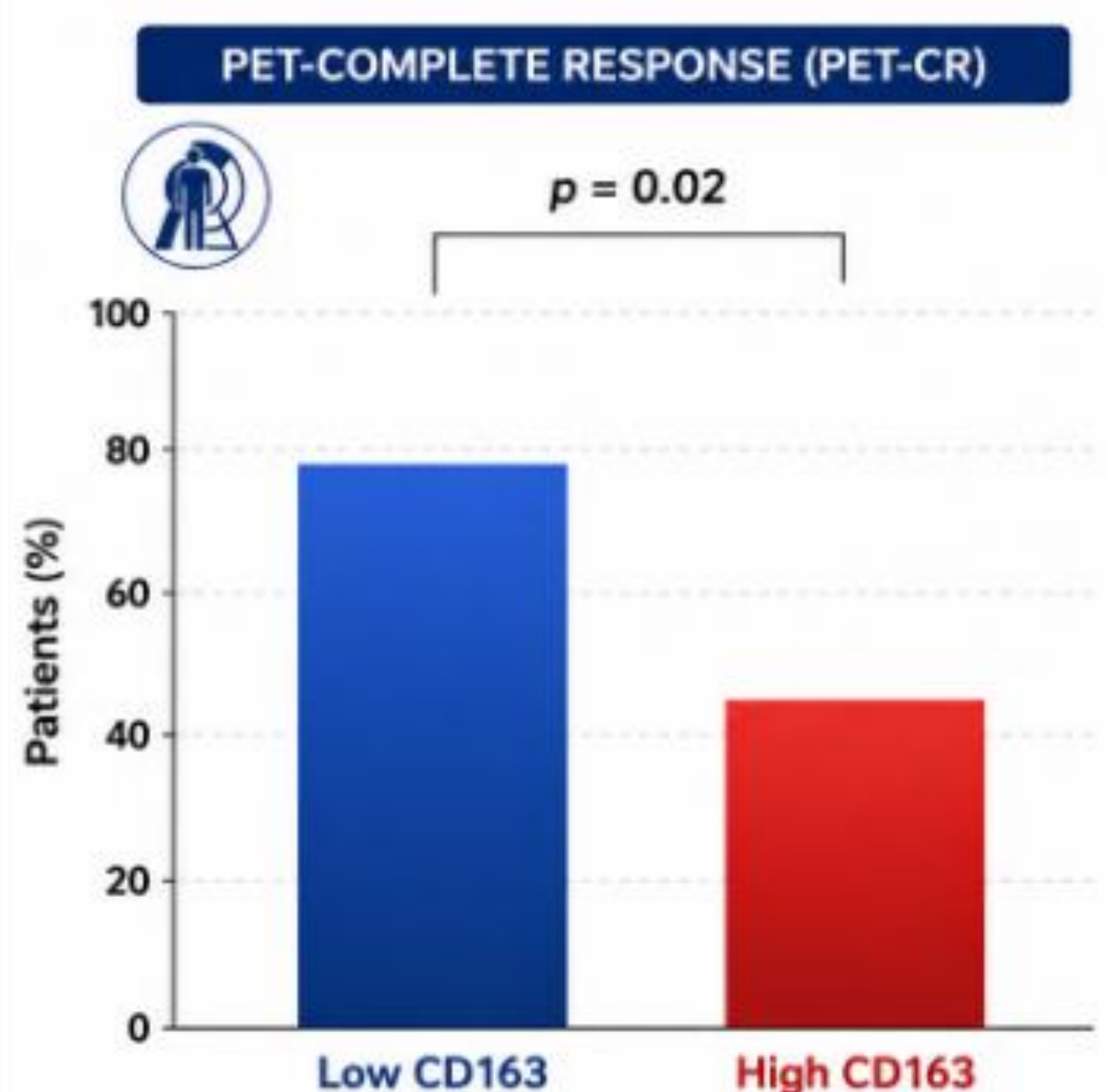
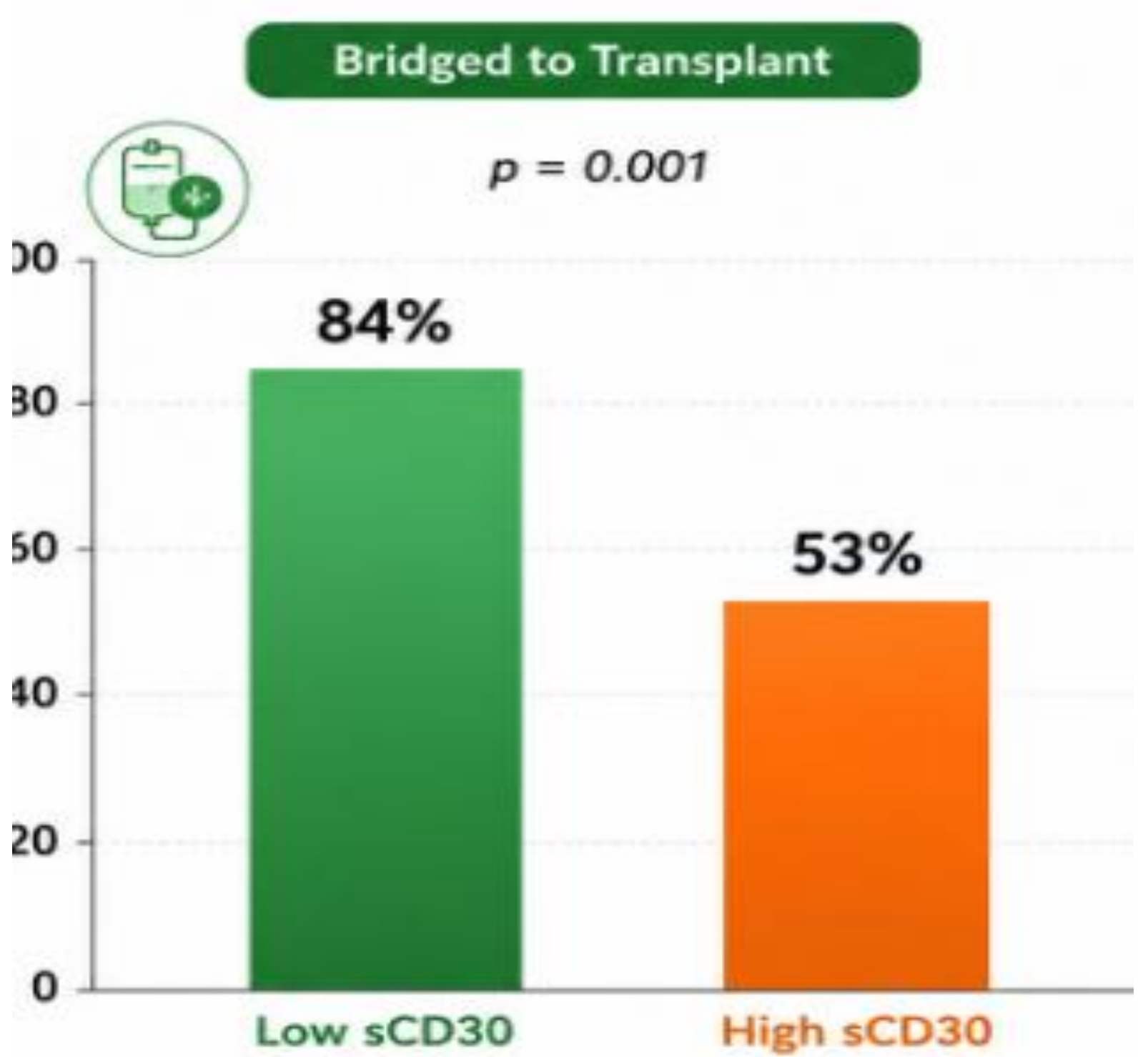
RESULTS

High sCD30 significantly associated with bulky disease ($p=0.04$), advanced stage ($p=0.02$), high LDH ($p=0.05$) and trend of positive correlation with IPS score ($p=0.06$). Increased CD163 expression was significantly associated with B symptoms ($p \leq 0.001$), high CRP level ($p=0.02$) and correlated positively with IPS ($p=0.05$).

Low sCD30 observed significantly better PET-CR rates ($p \leq 0.001$) with more bridged to transplant (84% versus 53%, $p=0.001$) versus high sCD30. PET-CR rate was significantly better in low CD163 expression ($p=0.02$) with ASCT achieved in 80% versus 58% in high CD163 ($p=0.01$). Dual-high patients, only 40% underwent transplantation ($p<0.001$).

With 2.5 years median follow-up, low sCD30 had better median PFS (27.1 vs 11.5 months, $p=0.02$). Also, low CD163 showed better median PFS (25.9 vs 13.6 months, $p=0.01$). Dual-high biomarkers demonstrated poorest outcomes; median PFS of only 8.4 months (versus dual-low, $p \leq 0.001$).

Median OS was not reached in low sCD30 versus 21.0 months in high sCD30 ($p \leq 0.001$). Median OS was 32.1 months in low CD163 patients compared to 22.3 months in high CD163 patients ($p=0.02$). Dual-high patients exhibited markedly inferior survival, with a median OS of 19.6 months ($p \leq 0.001$).



CONCLUSIONS

Soluble CD30 and CD163⁺ macrophage infiltration could predict response, transplant eligibility, and survival in relapsed cHL treated with ICE + BV as they could limit ADC delivery and promoting resistance. These patients may benefit from addition of PD-1 inhibitors to BV rather than chemotherapy.

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