



PRIMARY EFFUSION LYMPHOMA: CLINICAL CHARACTERISTICS AND NATURAL HISTORY

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BACKGROUND

Primary effusion lymphoma (PEL) is a very rare type of non-Hodgkin lymphoma (NHL), accounting for less than 4% of HIV related NHL and frequently occurring in the context of HIV or other states of immunosuppression infection. Large-scale studies describing the natural history of this entity are lacking.

METHODS

The national cancer database (NCDB) was queried for patients diagnosed with PEL between 2004 and 2017. All patients age ≥ 18 years diagnosed with PEL were included. We excluded patients with multiple primary malignancies or lost follow-up. Kaplan-Meier and multivariate cox regression were used in the analyses.

RESULTS

- ❖ A total of 219 PEL patients were included in the analysis, of which 179 (82%) were males and 161 (74%) Caucasian. 115 (53%) were HIV-positive, 63 (29%) HIV-negative. 111 (51%) received chemotherapy, 101 (46%) did not receive chemotherapy.
- ❖ The median age at diagnosis was 60 $\pm$ 19 years.
- ❖ The time to treat (TTT) from diagnosis to chemotherapy start was ≤ 8 days in 27 patients (Q1 group), within 9-15 days in 24 patients (Q2 group), within 16-32 days in 24 patients (Q3 group), and ≥ 32 days in 25 patients (Q4 group). The median OS for each group was 6 months, 13 months, 41 months, and 16 months, respectively, and the differences were not statistically significant [(Q1 vs Q2 P=0.576), (Q1 vs Q3 P=0.115), (Q1 vs Q4 P=0.246), (Q2 vs Q3 P=0.299), (Q2 vs Q4 P=0.675), (Q3 vs Q4 P=0.532)].
- ❖ Compared to HIV-negative patients, HIV-positive patients had better OS (median OS 13 vs 8 months, P=0.015).
- ❖ Patients who received chemotherapy had better OS compared to patients who did not receive chemotherapy (median OS 13 vs 3 months, P<0.001), and that was found in HIV-positive patients (median OS 22.97 vs 1.97 months, P=0.006), but not in HIV-negative patients (median OS 6 vs 8 months, P=0.752).
- ❖ On multivariate analysis, chemotherapy was associated with better OS (HR 0.502 95% CI 0.324-0.777; P=0.002), whereas HIV status did not affect the OS (HR 0.6 95% CI 0.3-1.4; P=0.258).

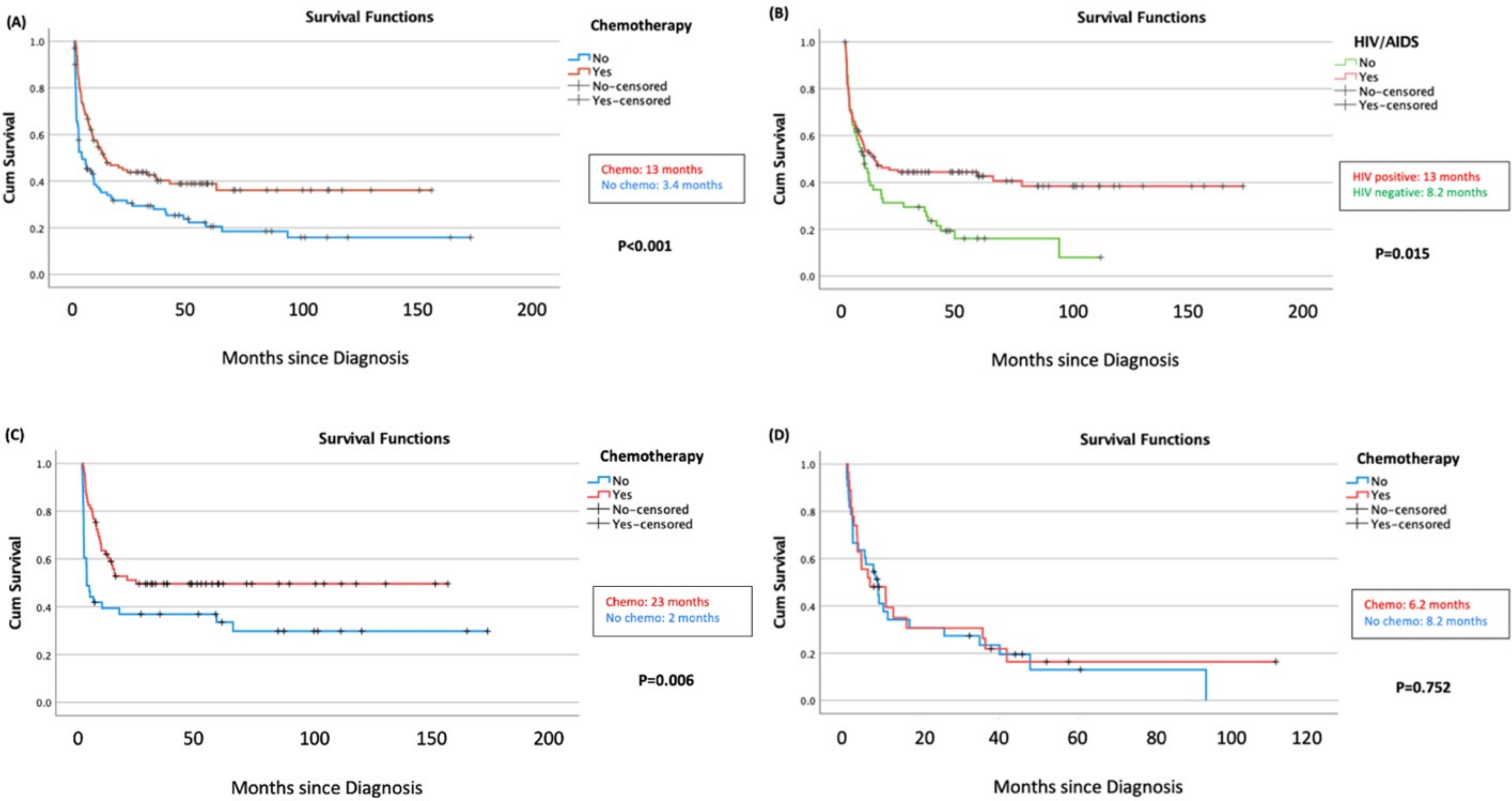


Figure 1. Median overall survival according to (A) chemotherapy status, (B) HIV status, (C) chemotherapy status in HIV-positive PEL and (D) chemotherapy status in HIV-negative PEL.

CONCLUSIONS

In contrast to the impression that HIV positivity might confer poorer outcomes, these data suggest that HIV-positive patients with PEL have comparable outcomes to HIV-negative patients, possibly due to improvement in antiretroviral therapy.