

Prognostic Value of the Glasgow Prognostic Score in a Slovene Cohort of Patients with Nodal T-Follicular Helper Cell Lymphoma

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Background:

The Glasgow Prognostic Score (GPS), based on C-reactive protein (CRP) and albumin levels, is an inflammation-based prognostic tool validated across multiple malignancies. Its role in nodal T-follicular helper cell lymphoma (nTFHL) remains unclear. A Chinese study reported GPS as an independent predictor of progression-free survival (PFS) and overall survival (OS) in nTFHL, angioimmunoblastic type (AI). We evaluated the prognostic value of GPS in a Slovene nTFHL cohort.

Methods:

All newly diagnosed nTFHL patients treated between 2007 and 2022 were included. Central pathology review was performed, and cases were classified into three nTFHL subgroups. International Prognostic Index (IPI) was calculated for each patient. Baseline CRP and albumin levels were collected, and GPS was calculated using standard cut-offs (CRP >10 mg/L, albumin <35 g/L). PFS was defined as time from diagnosis to disease progression or death, and OS as time from diagnosis to death from any cause. Survival was analysed using Kaplan-Meier estimates, log-rank tests, and Cox regression. Survival data were obtained from the National Cancer Registry (4 February 2026).

Results:

Ninety-nine patients were included (median age 69 years, range 26-87; 44.4% female). Diagnoses comprised nTFHL, AI (73.8%), nTFHL, not otherwise specified (NOS) (14.1%), composite lymphoma (nTFHL+ B cell non-Hodgkin lymphoma) (8.1%), and nTFHL, follicular type (FT) (3.7%). According to IPI, 13.1% of patients were low risk, 23.2% low-intermediate, 39.4% high-intermediate, and 22.2% high risk. Median follow-up was 25 months. The 2-year PFS rate was 20.7% (median 7 months), while 2- and 5-year OS rates were 50.5% and 36.2%, respectively.

Elevated CRP was present in 52.0% and hypoalbuminemia in 41.0% of patients. GPS groups 0, 1, and 2 accounted for 36.7%, 32.7%, and 30.6% of patients, respectively. OS differed significantly across GPS groups ($p=0.022$). Compared with GPS 0, GPS 2 was associated with inferior OS (HR 2.17, $p=0.004$). GPS remained significant after adjustment for histological subtype but not after adjustment for IPI. IPI was a strong predictor of OS ($p<0.001$). PFS differed across GPS groups ($p=0.004$); GPS2 was associated with inferior PFS (HR 2.35, $p=0.003$), remaining significant after adjustment for IPI.

Conclusions:

In this population-based nTFHL cohort, GPS is a significant prognostic marker for OS and PFS, particularly in the high-risk group. However, IPI remains an important prognostic factor.

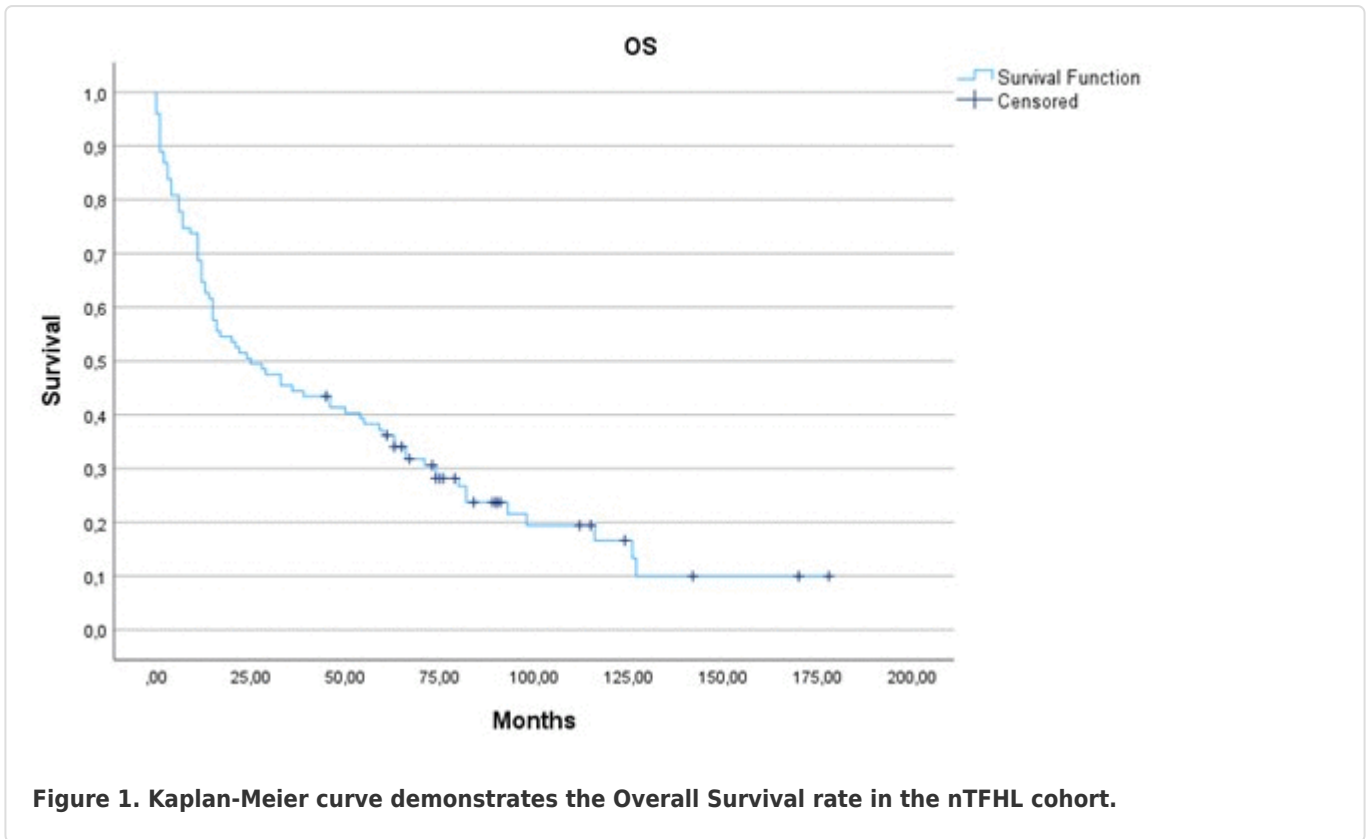


Figure 1. Kaplan-Meier curve demonstrates the Overall Survival rate in the nTFHL cohort.

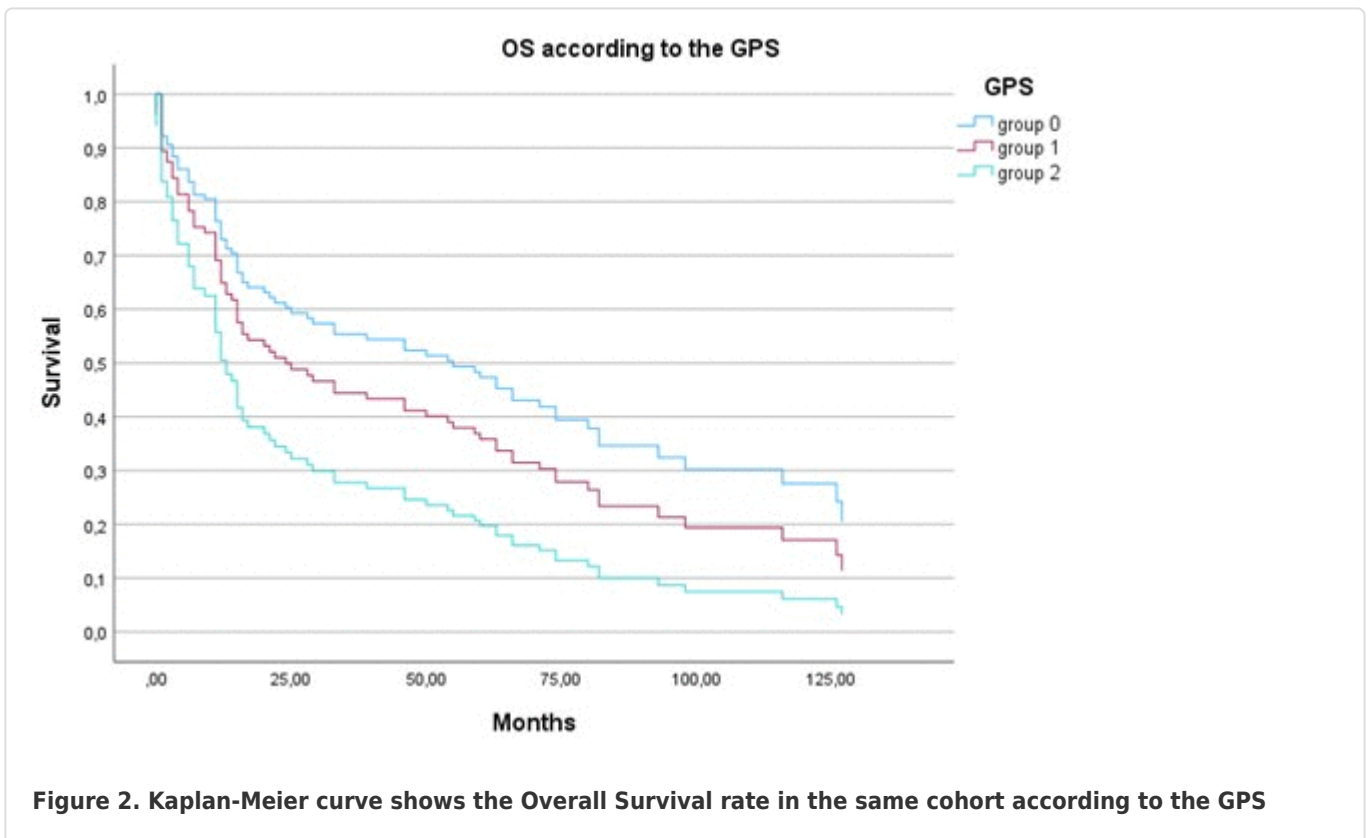


Figure 2. Kaplan-Meier curve shows the Overall Survival rate in the same cohort according to the GPS