

Diffuse large cell lymphomas: identification of prognostic factors and validation of the International Non-Hodgkin's Lymphoma Prognostic Index. A Hellenic Cooperative Oncology Group Study.

[Nicolaidis C](#), [Fountzilas G](#), [Zoumbos N](#), [Skarlos D](#), [Kosmidis P](#), [Pectasides D](#), [Karabelis A](#), [Giannakakis T](#), [Symeonidis A](#), [Papadopoulos A](#), [Antoniou F](#), [Pavlidis N](#).

Source

Department of Ioannina University Hospital, Ioannina, Greece.

Abstract

Several clinical prognostic factors have been identified that predict treatment outcome in patients with diffuse large cell lymphomas. An International Non-Hodgkin's Lymphoma Prognostic Index (IPI) has been recently formulated. We tried to identify the clinical prognostic factors that predict treatment outcome in Greek patients with diffuse large cell lymphomas and validated the IPI in these patients. The possible prognostic variables for tumor response, relapse-free (RFS) and overall survival (OS) were analyzed in 239 consecutive patients treated with anthracycline-based chemotherapy regimens. In univariate analysis, factors associated with poor response were stages III-IV, performance status (PS) ≥ 2 , spleen and bone marrow involvement, more than one extranodal site involved, increased lactate dehydrogenase (LDH) value, hemoglobin (Hb) < 12 g/dl, albumin < 3.5 g/dl, erythrocyte sedimentation rate (ESR) > 50 mm/h. Multivariate analysis identified stage, PS, more than one extranodal site involved, increased LDH level, and ESR > 50 mm/h as the factors more predictive of poor response. For RFS, multiple Cox analysis found stages III-IV and bone marrow involvement to be statistically significant. For OS, multiple Cox analysis identified stage III-IV, PS ≥ 2 , bone marrow involvement, more than one extranodal site involved, increased LDH level and ESR > 50 mm/h as negative prognostic factors. Patients stratified in the different risk groups of the IPI had a significantly different outcome regarding complete response (CR) rate, RFS and OS. In conclusion, although age > 60 years was not recognized as an adverse factor in this analysis, our patients stratified in the different groups of the IPI had significant differences in CR rate, 2-year RFS and OS verifying the prognostic significance of the index. Bone marrow involvement and ESR > 50 mm/h, parameters that are not included in the IPI, adversely affected survival.