

## INTISARI

### Kajian Faktor Prognosis Klinis, Morfologi, Subtipe Molekular dan Interleukin 10 pada *Diffuse Large B Cell Lymphoma*

#### Pendahuluan :

*Diffuse large B cell lymphoma* merupakan tumor ganas limfoid yang paling sering dijumpai dan memiliki perilaku klinis bervariasi. Parameter prognosis klinis *International Prognostic Index* masih menempatkan penderita pada kelompok prognosis heterogen. Faktor – faktor prognosis lain yang mencerminkan heterogenitas *diffuse large B cell lymphoma* meliputi varian morfologi, subtipe molekular, deregulasi genetik dan polimorfisme sitokin.

#### Tujuan penelitian :

Penelitian ini bertujuan untuk mengetahui profil limfoma di Yogyakarta, menganalisis hubungan antara IPI, varian morfologi, subtipe molekular, *double hit diffuse large B cell lymphoma*, polimorfisme gen IL10 serta ekspresi protein IL10 dengan ketahanan hidup.

#### Metode :

Cara penelitian dengan kohort retrospektif. Penderita *diffuse large B cell lymphoma* yang didiagnosis dan mendapat terapi standard yang ada tahun 2012-2016 diteliti secara kohort retrospektif dengan ditentukan faktor prognosis yang meliputi skor *International Prognostic Index*, varian morfologi, subtipe molekular, *double hit lymphoma*, polimorfisme gen IL10 dan ekspresi IL10. Pengamatan dilakukan sampai Juni 2016. Metode pemeriksaan dengan teknik imunohistokimia menggunakan antibodi CD3, CD20, CD10, Bcl2, Bcl6, MUM1, Cmyc untuk penggolongan subtipe molekular dan *double hit diffuse large B cell lymphoma*. Deteksi polimorfisme IL10 dengan *RFLP Polymerase Chain Reaction*.

#### Hasil Penelitian :

Selama tiga tahun didapatkan peningkatan jumlah kasus limfoma di RS Sardjito Yogyakarta. Jumlah kasus terbanyak dijumpai pada usia dekade keenam.. Traktus respiratorius dan regio kepala-leher adalah lokasi ektranodal terbanyak. Pada analisis univariat didapatkan perbedaan bermakna antara usia ( $p=0,027$ ) dan *performance status* ( $p=0,000$ ) sebagai komponen skor IPI dengan ketahanan hidup *diffuse large B cell lymphoma*. Tidak didapatkan hubungan

bermakna antara varian morfologi, sub tipe molekular, polimorfisme gen IL10 serta ekspresi protein IL10 dengan ketahanan hidup *diffuse large B cell lymphoma*.

Simpulan :

Pada penelitian ini, faktor yang berpengaruh terhadap ketahanan hidup *diffuse large B cell lymphoma* berdasarkan analisis univariat adalah usia dan *performance status*.

Kata kunci : *diffuse large B cell lymphoma, usia, performance status, varian morfologi, sub tipe molekular, polimorfisme IL10*

## **ABSTRACT**

### **Prognostic Factors Study of Clinical, Morphology, Molecular Subtypes and Interleukin 10 in Diffuse Large B Cell Lymphoma**

#### **Introduction :**

Diffuse large B cell lymphoma is the most common lymphoid tumor with heterogenous clinical behavior. International Prognostic Index (IPI) as clinical prognostic parameter still classify the patient in heterogenous prognosis. The other important prognostic factors of diffuse large B cell lymphoma including morphology variant, molecular subtype, genetic deregulation and cytokine polymorphism.

#### **Objective :**

The aim of this study is to investigate lymphoma profile in Yogyakarta, to determine correlation between morphology variant, molecular subtype, IL10 gene polymorphism, IL10 protein expression and overall survival of diffuse large B cell lymphoma.

#### **Method :**

Research design is retrospective cohort. Diffuse large B cell lymphoma patients who were diagnosed and treated year of 2012-2016 followed prospectively by determining good and poor prognosis including IPI score, morphology variant, molecular subtype, double hit lymphoma, IL 10 cytokine polymorphism and IL10 expression. The end of patients follow up is June 2016. Immunohistochemical examination using CD3, CD20, CD10, Bcl2, Bcl6, MUM1, Cmyc antibody has been performed to classify molecular subtype and double hit diffuse large B cell lymphoma. IL 10 gene polymorphisms was detected by RFLP-Polymerase Chain Reaction.

#### **Result :**

During three years there was increasing incidence of lymphoma at Sardjito Hospital Yogyakarta. The highest incidence occur in sixth decade. Respiratory tract, head and neck were the most common extranodal location. There was significant correlation between age (  $p=0,027$  ), performance status (  $p=0,000$  ) and survival by univariate analysis. This research did not found significant

correlation between morphology variant, molecular subtype, IL10 gene polymorphism, IL10 protein expression and overall survival of diffuse large B cell lymphoma.

**Conclusion :**

Age and performance status influence survival of *diffuse large B cell lymphoma* by univariate analysis.

Key word : *diffuse large B cell lymphoma, age, performance status, morphology variant, molecular subtype, IL 10 polymorphism*