

00539 Synchronous and Metachronous Diffuse Large B-cell Lymphoma Transformed From Follicular Lymphoma - A Comparative Analysis

Lim Mao Heng Ryan¹, Chan Pei Xin Natalie¹, Khoo Lay Poh², Cheng Chee Leong³, Tan Hwan Cheong Leonard³, Poon Yi Ling Eileen², Nagavalli Somasundaram², Mohamad Farid², Tang Pooi Ling Tiffany², Miriam Tao², Lim Soon Thye², Chan Yongsheng Jason²

¹National University of Singapore, ²National Cancer Centre Singapore, ³Singapore General Hospital

Aims: Histological components of diffuse large B-cell lymphoma (DLBCL) and follicular lymphoma (FL) may be discovered synchronously at initial diagnosis or metachronously at the time of transformation of an earlier diagnosed FL. The aim of this study was to compare the clinico-pathological characteristics and prognosis between these entities.

Methodology: Patients who were consecutively diagnosed with composite FL/DLBCL (n=117) and FL (n=346) from 2001-2017 at the National Cancer Centre Singapore and Singapore General Hospital were retrospectively analyzed. Chi-squared tests were performed to evaluate clinico-pathological associations between the two cohorts. Survival analysis was performed using the Kaplan-Meier method and the log-rank test.

Result: Amongst the FL cases, 21 patients (6.1%) with metachronous transformed FL/DLBCL were identified. The median lag time from diagnosis of FL to DLBCL transformation was 47 months (range, 7.8-168). Clinico-pathological features in synchronous and metachronous FL/DLBCL were similar, with both entities demonstrating a male preponderance (67% male and 33% female). Median age at diagnosis was 67 years (range, 41-81) and 60 years (range, 24-90) for metachronous and synchronous FL/DLBCL, respectively. The cell of origin by Han's criteria was similar (metachronous: GCB 52%, ABC 43%, unknown 5%; synchronous: GCB 57%, ABC 37%, unknown 6%). Overall survival (OS) from the time of lymphoma diagnosis was not different for both metachronous and synchronous FL/DLBCL ($p = 0.663$). Survival from the time of DLBCL development however, was worse (median, 3 vs 12 years) for metachronous compared to synchronous FL/DLBCL (HR 2.13, 95% CI 0.86-5.25, $p = 0.0288$).

Conclusion: Metachronous and synchronous FL/DLBCL share similar clinico-pathological characteristics. A preceding diagnosis of FL however, predicts for significantly worse survival outcomes and needs to be duly considered in patient prognostication.