

Outcomes of non-metastatic triple-negative and non-triple-negative breast cancer: A single centre analysis

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ABSTRACT

Introduction: Triple-negative breast cancer (TNBC) is a distinct breast cancer subtype which exhibits aggressive clinical behaviour and poor prognosis. This study aimed to study the clinic-pathological features and overall survival (OS) between TNBC and non-TNBC and to identify the prognostic factors. **Methods:** This retrospective study included 1294 non-metastatic breast cancer women diagnosed from 2011 until 2015 and followed up until 31st December 2020. The patients were divided into two groups: TNBC when tumours were negative for all hormone receptors (n=205) and non-TNBC (n=1089). Differences in the distribution of clinic-pathological parameters were compared by Chi-square test. Survival functions were calculated using the Kaplan-Meier method. Prognostic factors of OS were analyzed by the Cox proportional hazards model, and the hazard ratios (HRs) were calculated with a 95% confidence interval(CI). **Results:** The TNBC tended to present at diagnosis with moderate/high grade (p<0.001) and tumour size of >2 cm (p=0.01). Decreased OS was observed for patients with TNBC compared with non-TNBC (5-year OS rates: 68% vs 75%; HR= 1.38; 95% CI, 1.03 to 1.84), involvement of positive lymph nodes (HR=1.66; 95% CI, 1.18 to 2.33), larger tumour size (HR=1.82; 95% CI, 1.15 to 2.89) higher grade(HR=1.89; 95% CI, 1.29 to 2.77)and advanced stage (HR=2.44; 95% CI, 1.85 to 3.23). **Conclusion:** Patients with TNBC have worse survival than non-TNBC and exhibit more aggressive behaviour and important clinical features to be considered in the management of these patients.