

P18.11

Disease-free survival in molecular subtypes of breast cancer in Malta

Keith Sacco¹, Shawn Baldacchino¹, Christian Saliba², Christian Scerri³, Godfrey Grech¹

¹Department of Pathology, University of Malta, ²Centre for Molecular Medicine and Biobanking, ³Department of Physiology & Biochemistry, University of Malta

Introduction: Breast cancer is the commonest incident tumour in the Maltese islands. The disease is heterogeneous and exhibits diverse clinical prognosis and survival rates. Proper patient classification helps stratify breast cancer groups to ascertain likely prognostic outcome and select treatment. Breast cancer survival has commonly been described in terms of disease-free survival and five-year overall survival. The aim of this study is to determine disease-free survival together with site of metastasis while stratifying clinical outcomes with known prognostic markers and novel genetic markers.

Methods: We randomly selected 100 patients in each year between 2009 and 2011 notified with a primary diagnosis of invasive breast cancer at the Malta Cancer Registry. We collected retrospective data pertaining to patient demographics, tumour type, treatment undertaken and time to relapse with site of metastases. The primary end-point was disease-free survival; defined as the first documented radiological relapse following complete tumour resection. Patient survival data was stratified using multiple prognostic variables.

Results: The average annual incident rate of breast cancer was calculated at 317.4 cases per year between 2009 and 2013. The mean age of presentation is 61.5 years with 46.7% presenting at Stage I, 42.2% at stage II and 11.1% with Stage III disease ($p < 0.01$). 91.3% were estrogen receptor positive and 6.9% HER2 positive. 3-year overall survival was 80.2% and 84% in 2009 and 2010 respectively.

Conclusion: This study helps classify the Maltese breast cancer cohort and determine selective survival by subgroup analysis while helping to identify variables with prognostic clinical relevance to the Maltese population.