

## **Unique clinicopathological characteristic and survival rate of metaplastic breast cancer;a special subtype of breast cancer a 5 year cohort study in single referral centre in North Borneo**

### **ABSTRACT**

**Introduction:** Metaplastic Breast Cancer (MBC) of the breast is a rare entity of breast cancer, with a very poor prognosis, and whose pathophysiology is still unwell established. Therapeutic management is very heterogeneous due to its incomplete understanding. The aim of this study is to describe the demographic, clinical, and therapeutic characteristics of our MBC patient.

**Material and methods:** A cross-sectional study was conducted to evaluate the demographic and clinicopathological features of these patients. Data of patients diagnosed with metaplastic breast cancer were retrieved from our breast cancer database in Queen Elizabeth Hospital II from January 2015 to May 2021.

**Results:** 14 patients were diagnosed with metaplastic breast cancer during this period of study. All of them were female, with the average age of 52 years old. The patients were predominantly Bajau and Kadazan Dusun, each comprising of 35%(n = 5). 57% (n = 8) of patients were postmenopausal. 85% (n = 12) of patients were presented with breast lump of an average largest diameter of 69.23 mm. BIRADS staging of the affected breast revealed that most of the patients were BIRADS 5.57% (n = 8) patients underwent mastectomy, 4 went for either breast conserving surgery of the breast. The most common histopathological type is squamous cell carcinoma, which accounts for 42% (n = 6) of the patients. 71% (n = 10) were pathologically triple negative. 7 patients were pathologically node positive. 35% (n = 5) had lung metastasis, and one of the patients had concurrent lung and liver metastasis.

**Conclusion:** The prognosis of patients with Metaplastic carcinoma of breast remains poor because most of it detected late and histologically triple negative type. Till date, there is no specific management guideline which warrant a multi institutional studies evaluating role of new therapies such as Anti-PD-1 Therapy in combination with chemotherapy to improve patient outcome.