## AGE AND SURVIVAL STATUS OF BREAST CANCER PATIENTS AT TWO HOSPITALS IN THE WESTERN REGION OF SAUDI ARABIA

## By

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## Abstract:

**Objective:** To review the pattern of breast cancer (BC) presentations and to correlate the age and survival status to all known prognostic factors in two tertiary health care centers in the western region of Saudi Arabia diagnosed between January 2000 and December 2004.

Methods: Data were collected from the medical records then analyzed using SPSS statistical program (frequencies, chi- square test and Fishers Exact test). Results: Two hundred ninety patients (pt) participated in this study. Ninety three (32.1%) were 40 years of age or less and 197 (67.9%) were > 40 years. Survival status revealed; Alive 239 pts (82.4%), Dead 28 pts (9.7%) and unknown 23 pts (7.9%). Correlation of age with all known prognostic factors revealed that younger age group correlates significantly to; higher number of positive lymph nodes (p= 0.007), tumor grade (III, IV) (p= 0.010), negative estrogen receptor (ER) status (p= 0.018) and HER2/neu overexpression (3+ by immunohistochemistry) (p= 0.008). Correlation of survival status with all known BC features and prognostic factors revealed poor survival with; young age (p= 0.009), tumor size (T3, T4) (p= < 0.001), number of positive lymph nodes (p= 0.004), presence of metastasis (p= < 0.001), high tumor grade (III, IV) (p= < 0.001), presence of lympho-vascular invasion (p= 0.021), negative progesterone receptor (PR) status (p= 0.031) and HER2/neu overexpression (3+) (p= 0.003).

**Conclusions:** Breast cancer presents in a younger age group compared to the western communities which is relatively more aggressive with poor survival.

Awareness and screening programs are highly recommended.

Key Words: Breast cancer, Young age, Prognosis, Survival, Saudi Arabia.