

**THE OUTCOME OF BREAST CANCER BASED ON  
THE EXPRESSION OF C-ERBB2 , ESTROGEN  
RECEPTOR AND PROGESTERONE RECEPTOR:  
KELANTAN EXPERIENCE 2002-2004**

By:

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## **ABSTRAK**

Barah payudara merupakan barah yang paling sering terjadi di kalangan wanita Malaysia. Terdapat banyak faktor penentu yang menjadi penyumbang kepada terjadinya penyakit ini dan nasib akhir pesakitnya. Oleh itu satu kajian retrospektif telah dibuat untuk melihat kesudahan kepada pesakit barah payudara serta kaitannya dengan status hormon reseptor (reseptor estrogen dan progesteron) dan ekspresi c-erbB-2. Faktor-faktor klinikalpatologikal lain seperti umur pesakit, gred tumur, size tumor dan lain-lain juga dikaji kaitannya dengan ‘survival’ keseluruhan pesakit, reseptor estrogen, reseptor progesteron dan ekspresi c-erbB-2.

Sebanyak 115 kes barah payudara sepanjang tahun 2002-2204 terlibat dalam kajian ini. Dari jumlah tersebut, 45.2% adalah reseptor estrogen positif, 48.7% adalah PR positif manakala 39.1% menunjukkan ekspresi c-erbB-2. Terdapat kaitan secara langsung antara status reseptor estrogen dengan gred tumur, size tumor dan reseptor progesterone. Reseptor progesterone juga menunjukkan kaitan secara langsung dengan gred tumor. Manakala status c-erbB-2 menunjukkan kaitan secara langsung dengan gred tumor dan positif kelenjar limpa. Analisis secara ‘univariate’ menunjukkan ‘survival’ keseluruhan yang lebih pendek dikalangan pesakit dengan positif kelenjar limpa, negatif reseptor estrogen dan positif c-erbB-2. Analisis secara ‘multivariate’ menunjukkan status c-erbB-2 merupakan faktor penentu tersendiri yang paling kuat diikuti dengan reseptor estrogen. Manakala status kelenjar limpa tidak menunjukkan keputusan yang signifikan sebagai faktor penentu. Kesimpulannya, status c-erbB-2 dan reseptor estrogen merupakan faktor penentu yang paling kuat terhadap kesudahan pesakit barah payudara.

## **ABSTRACT**

Breast cancer is the most common cancer among Malaysian women. There are many prognostic factors contributing to the disease and the outcome of the patients. Hence, a retrospective study was carried out aiming to observe the outcome of breast cancer patient in terms of overall survival with relation to estrogen receptor (ER), progesterone receptor (PR) and c erbB-2 expression. In addition, patient's age, histological subtype, tumor grade, tumor size and lymph node involvement were also analyzed against overall survival, ER, PR and c erbB-2 expression.

115 cases of breast cancer diagnosed in three years, 2002 to 2004, were reviewed. It was found that ER and PR status were positive in 45.2% and 48.7% respectively while 39.1% showed c erbB-2 overexpression. There was significant association between ER status with tumour grade, tumour size, and PR status. Significant association was also found between PR status with tumour grade. There was significant association between c erbB-2 status with tumour grade and lymph nodes involvement. Univariate analysis showed shorter overall survival in patients with lymph node positive status, ER negativity, and c-erbB-2 oncprotein overexpression. In multivariate prognostic analysis, c erbB-2 status was the strongest independent prognostic factor and ER status was the second most significant independent prognostic factor for overall survival. However, lymph node status was not a significant independent prognostic factor. From these finding, it was concluded that c erbB-2 and ER status was the strongest prognostic factors contributing to the outcome of breast cancer patients.