hormonotherapy; immunotherapy as appropriate). At 3 years follow-up, 66% of patients are still disease free and 97% alive.

In conclusion: our results are in the line of most recent reports dealing with the possibility to enhance pCR for (moderately) advanced early breast cancer with an association of anthracyclines and taxanes. This sequential protocol was, in our hands, better tolerated than our previously reported epirubicine-taxol schedule (Anticancer Res 2005, 1211–18) with no cardiac toxicity. **Keywords:** anthracyclines, taxanes, early breast cancer

380 PUBLICATIO

The clinical outcome of 1034 Chinese patients after adjuvant therapies for female breast cancer, Hong Kong AR, China

F.Y. Cheung, C.C. Tong, V.C. Sin, T.M. Chan, M.C. Cheung, K.C. Ngan. Queen Elizabeth Hospital, Clinical Oncology, Hong Kong, China

Background: The benefits of adjuvant therapies in breast cancer are well established in western populations but there are few large reports on the clinical outcome in Chinese patients (pts). This retrospective review analyzed clinical endpoints of local control (LC), axillary control (RC), metastatis-free survival (MFS), overall survival (OS), and relapse-free survival (RFS) in such pts after either adjuvant systemic or loco-regional (LR) therapies or both. In our institute, local chest wall radiotherapy (RT) after mastectomy is indicated when T size is  $\geqslant 4$  cm, resection margin is  $\geqslant 0.5$  cm and lymphovascular permeation (LVI) is present. Regional lymph node (LN) RT is indicated when there are  $\leqslant 4$  involved axillary LN (LN+), extensive extracapsular invasion (EC) and inadequate number of LN dissected. Adjuvant chemotherapy is indicated when pts have LN+, T size > 2 cm or grade 3 histology. Classical CMF and Tamoxifen constituted the majority of adjuvant chemotherapy and hormonal therapy regimens.

Material and methods: 1034 pts with invasive breast cancer who had received adjuvant therapy from 1996 to 1999 were stratified according to age, T stage, resection margin status, LVI status, menopausal status, estrogen-receptor (ER) status, progestogen-receptor (PR) status, LN status and presence or absence of LN EC before analysis. Overall, 346, 551, 80, and 45 pts had stage T1, 2, 3, and 4 cancers respectively. Among those 90.5% pts with invasive ductal carcinoma, 42.6%, and 38.3% had histological grades 3 and 2 respectively. ER and PR positive tumors were found in 58.4% and 48.8% pts respectively. There were 52.7% LN+ pts. While 35.6% pts received LR, RT and 29.6% local RT only, 55% pts had chemotherapy and 58.4% pts hormonal therapy.

Results: The median age was 54.7 (range: 24–102) and 52.9% pts were

**Results:** The median age was 54.7 (range: 24–102) and 52.9% pts were menstruating at presentation. Menopaused pts had higher rate of LN+ and higher T stage (p < 0.01). At a median follow-up of 56 months, the 5 year LC, RC, MFS, RFS and OS rates were 95.4%, 98.2%, 80.1%, 78.6% and 83.2% respectively. Altogether, 48 (4.5%), 20 (1.9%) and 217 (21%) pts had local, axillary and systemic relapses respectively. Statistically significant prognostic factors for various clinical endpoints are tabulated as follows.

Clinical endpoints	Significant prognostic factors in multivariate analysis
LC	T stage, PR status, LVI status
RC	nil
MFS	Age, menopausal status, T stage, LN status, ER status, LVI status
RFS	Age, LN status, PR status, LVI status
OS	Age, menopausal status, T stage, LN status, tumor grade, LVI status

Conclusion: This report demonstrated in Chinese pts the clinical significance of LVI and other common prognostic factors. The local and axillary control rates were excellent but there was room for improvement in preventing distant metastasis and especially in older pts. The increased use of anthracycline-based chemotherapy after 1999 may improve the outcome of subsequent pt cohorts.

381 PUBLICATION
The relationship between serum cholesterol level and avillary lymph

The relationship between serum cholesterol level and axillary lymph node status in breast cancer patients

G. Utkan, H. Onur, H. Akbulut, B. Yalcin, A. Buyukcelik, I. Tek, H. Doruk, M. Dogan, A. Demirkazik, F. Icli. *Ankara University, Medical Oncology, Ankara. Turkev* 

**Backround:** Estrogen is known to decrease total cholesterol and low density lipoprotein levels whereas it increases high density lipoprotein level. The aim of the study is evaluation of the association between serum total cholesterol level, tumor size and axillary status.

Material and method: In this retrospective study, 150 patients who underwent breast cancer surgery and adjuvant chemotherapy were

evaluated for axillary lymph node status, tumor size and serum total cholesterol level. Measurement of serum total cholesterol level within 3 months before or after cancer surgery was accepted as reference value. Body mass index (BMI) was calculated for all patients. None of them had hypothyroidism, hyperthyroidism, diabetes mellitus and alcohol abuse. Level above 200 mg/dL for serum total cholesterol was defined as hypercholesterolemia.

Results: Characteristics of patients are listed in Table 1. BMI was found significantly associated with age, menopausal status and total cholesterol level (p=0.0001, p=0.012, p=0.038; respectively). There was no correlation between serum total cholesterol level and number of resected axillary lymph nodes (p=0.069). Number of positive axillary lymph nodes was inversely correlated with serum total cholesterol level (r=7minus;0.189, p=0.022). Serum total cholesterol level was determined as an independent prognostic factor for evaluating number of positive axillary lymph nodes in multivariate analysis (p=0.01). The relationship between high serum total cholesterol level and number of positive axillary lymph nodes is shown in Table 2 (p=0.05).

Table 1: Characteristics of patients (median values)

Age (year)	51
Tumor size (cm)	3
Total number of resected axillary lymph nodes	17
Number of positive axillary lymp nodes	1
BMI (kg/m <sup>2</sup> )	28.4
Serum total cholesterol level (mg/dL)	208
Premenopausal/postmenopausal (%)	56/44

Table 2: The relationship between serum total cholesterol level and number of positive axillary lymph nodes.

axillary Lymph node status (N)	Rate of high serum total cholesterol level (%)
0	61.9
1-3	72.2
4-9	59.1
≥ 10	38.5

Conclusions: Despite small number of patients in this study, we found an inverse correlation between serum total cholesterol level and number of positive axillary lymph nodes. The effect of BMI in breast cancer is known. But relation with total cholesterol level, axillary involvement and the effect on survive, should experienced by large number of studies.

382 PUBLICATION

Diagnostic trends over 15 years in patients with breast cancer. Importance of having a computerised clinico-pathological database

U. Bohn<sup>1,3</sup>, M. Adolfo<sup>1,2</sup>, J. Purificacion<sup>4</sup>, V. Victor<sup>1,2</sup>, W. Marta<sup>1</sup>, J. Aguiar<sup>1,3</sup>, C. Bilbao<sup>1,5</sup>, R. Chirino<sup>1,5</sup>, N. Diaz-Chico<sup>1,5</sup>, J. Diaz-Chico<sup>1,5</sup>. Hospital Universitario Dr. Negrin, Medical Oncology, Las Palmas De Gran Canaria, Spain; <sup>2</sup>Hospital Universitario Insular, Medical Oncology, Las Palmas De Gran Canaria, Spain; <sup>3</sup>Hospital Mateno Infantil, Obstetric And Gynecology, Las Palmas De Gran Canaria, Spain; <sup>4</sup>Hospital Universitario Insular, Surgery, Las Palmas De Gran Canaria, Spain; <sup>5</sup>Instituto Canario De Investigación Del Cancer (Icic), Basic Department, Las Palmas De Gran Canaria, Spain

**Introduction:** To be able to conduct effectively a clinical or basic research study on cancer patients, an easy access to the maximum information of the patients is needed.

**Objectives:** To create a centralised computerised database from the clinical histories of breast cancer patients.

**Design:** Review of the clinical histories of all the patients with breast cancer diagnosed and treated at the 3 University Hospitals of Las Palmas de Gran Canaria, Canary Islands, Spain. From each clinical chart we collected more than 70 variables and arranged them in 5 major groups: antecedents, clinical diagnosis, anatomical and pathological diagnosis, treatment, and clinical course of the disease.

Results: Between Jun 2003 and May 2005, 2150 cases were incorporated into the database, corresponding to patients diagnosed after January 1975. Here we want to highlight 2 aspects about the variables behaviour during part of the diagnostic period: 1) the detection by mammography increased progressively from 9.6% in 1990–94, to 27.4% in 95–99, and to 53.9% in