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# Letters

## Phase II Study of Combination Vincristine, Epirubicin and Cyclophosphamide in Advanced Breast Cancer in Chinese Patients

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BREAST CANCER is the commonest female cancer in Hong Kong [1]. Chemotherapy is highly effective although little is known about its effects on breast cancer in Chinese people.

From 1985 to 1989, 83 patients with advanced breast cancer were entered into a phase II study of combination chemotherapy. Their treatment was vincristine 2 mg, epirubicin 70 mg/m$^2$, and cyclophosphamide 500 mg/m$^2$ given every 3 weeks for a maximum of 8 cycles, all intravenously on day 1. Before entry, all patients had full blood counts, liver and renal function tests and an electrocardiogram. Bone scan, ultrasound of liver, and chest X-ray were also done. Inclusion criteria were histologically proven advanced breast cancer; age under 75; disease evaluable clinically or radiologically; Karnofsky performance score of more than 70; white blood counts of more than $3 \times 10^9$/l and platelets of more than $100 \times 10^9$/l. The treatment was delayed weekly until the white blood counts were more than $3 \times 10^9$/l and platelets were more than $100 \times 10^9$/l.

Tumour response was assessed after two cycles. If the response was static or progressive, treatment was discontinued. Patients with responsive disease were given a maximum of eight cycles. Response and toxicity to treatment were scored with WHO criteria [2]. Complete response was defined as disappearance of all evidence of disease (two observations at least 4 weeks apart). Partial response was a decrease of at least 50% of the products of the largest perpendicular diameters of evaluable lesions. It is not necessary for all evaluable lesions to have regressed to count as a partial response; however there should not have been development of new lesions. Stable disease was a decrease of less than 50% in the products of the diameters of evaluable lesions or a less than 25% increase in the same measurements. Progressive disease was a 25% or more increase in the size of at least one evaluable lesion or the appearance of a new lesion. The new development of a pleural effusion or ascites was also considered progressive disease, if this was confirmed by cytology.

3 patients were not evaluable for response due to protocol violation (no evaluable disease either clinically or radiologically). Histologically all except 1 case had infiltrating ductal carcinoma (Table 1). 21 out of 80 (26%) patients achieved a complete response; 24 (30%) achieved a partial response. Therefore the overall response rate was 56%. 20 (25%) showed static response and 15 (19%) had progressive disease on treatment.

*Table 1. Clinical characteristics of patients*

| | |
|---|---|
| Median age | 46 (27–70) |
| Previous locoregional RT | 43 |
| Previous chemotherapy | 31 |
| Median KPS | 100 (70–100) |
| Median no. of cycles received | 6 (2–8) |
| Site of metastases | |
| Liver | 12 |
| Lung | 15 |
| Chest Wall | 32 |
| Lymph node | 22 |
| Bone | 1 |
| Kidney | 1 |
| Menstrual status | |
| Premenopausal | 48 |
| Perimenopausal | 3 |
| Postmenopausal | 29 |
| Unknown | 3 |

RT = radiotherapy, KPS = Karnofsky performance score.

At the time of analysis, 64 patients had already died and 2 had defaulted follow-up; only 17 patients remained alive. The median survival of the dead patients was 40.1 weeks (range 3.4–151.4). For those who are alive, median survival is 104.4 weeks (30.3–160.6).

4 out of 83 (5%) patients had grade 4 and 15 (18%) grade 2–3 haematological toxicity. 56 (67%) had grade 2–3 nausea and vomiting. 33 (40%) had grade 1 peripheral neuropathy. Only 2 (2%) had grade I cardiac toxicity.

It is not clear whether a disease such as breast cancer in one ethnic group behaves the same as in another and it is easy to extrapolate data from the West for reference. We have done a phase II study of combination chemotherapy in a selected Chinese group with advanced breast cancer. The response rate was similar to the overall response rate of 40–80% reported in the West [3]. The overall median survival was also similar to that in the West with a medium survival of 9 months in patients with visceral metastases [4–6]. Vincristine, epirubicin and cyclosphosphamide is as active in Chinese patients with breast cancer as cases in the West.

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