

In 3 pts TBI was repeated during the follow-up period. Radiation therapy was well tolerated. Partial or minor responses were obtained in 29 cases, even after failed chemotherapy. Disease stabilization occurred in 3, and progression in 1 pts. Median 2-years survival was 36%. This data confirms the value of HBI and TBI in the management of metastatic breast cancer.

#### PP-8-12 Unclear Value of Salvage Chemotherapy After Failure to First-Line 5-Fluorouracil, Epirubicin, Cyclophosphamide (FEC) Regimen for Metastatic Breast Cancer

G. Gardin, E. Campora\*, M. Gasco, P.F. Conte, R. Rosso. *Istituto Nazionale per la Ricerca sul Cancro, Genova and Ospedale Santa Chiara, Pisa, Italy*

The clinical benefit of salvage chemotherapy following failure of a first-line regimen was retrospectively analyzed in 140 metastatic breast cancer patients all homogeneously treated with first-line FEC and followed until death by a single institution. Pt characteristics: median age 54.5 yr. (range, 29–71 yr.); median ECOG PS 0 (0–3); median DFI 22 mos. (0–164); dominant site: soft tissue 13 (9%), bone 43 (31%), viscera 84 (60%). After disease progression, 72/140 (51%) pts received at least 1 line of salvage CT. Overall response (CR + PR), response rate (RR) and time to treatment failure (TTF) of FEC and all subsequent salvage regimens was:

Treatment	Total	CR + PR	RR (%)	Median TTF in months
I CT (FEC)	140	57	40.7	7.5
II CT line	72	7	9.7	2.6
III CT line	24	1	4.2	1.7
IV CT line	10	1	10.0	0.9
V CT line	3	0	0.0	1.9
VI CT line	1	0	0.0	–

Only a very small fraction of pts receiving first-line FEC can objectively respond to subsequent CT regimens. The advantages of salvage CT are unclear and must be weighed against the inconvenience, cost, and morbidity of treatment.

#### PP-8-13 Chemoradiotherapy in Complex Treatment of Locally Advanced Breast Cancer

V. Letyagin\*, M. Shomova, I. Visotskaya, V. Bogatyrev, Z. Zautashvili, E. Pogodina, N. Shomova, M. Ratiani. *Cancer Research Centre, Moscow, 115478, Russia*

On purpose to compare the efficacy of two chemotherapy regimens, the complex treatment method was applied to 121 patients with locally advanced breast cancer (LABC). Radiotherapy was given before operation with CMF to 61 patients or VAM to 60 patients. All women were operated on with mastectomy. Chemotherapy was continued after operation. Whole course of treatment consisted of 6 cycles of CMF or VAM respectively. Hormonotherapy was administered in patients with ER+ tumours. Androgens or prednisone were given in premenopausal patients after ovariectomy. Postmenopausal women were treated with tamoxifen for two years. While comparing results we couldn't find any difference in survival rate in patients treated with CMF or VAM. 5-year overall survival was 62.79% in VAM group and 66.26% in CMF group. Disease-free survival was 48.08 and 50.67% respectively. Our finding suggest that CMF regimen is of the same efficacy as VAM in treatment of patients with LABC and can be successfully used in treatment of patients with LABC.

#### PP-8-14 Five-Year Results of a Multimodal Management of Stage III B Breast Cancer

B. Massidda\*, M.T. Ionta, M.R. Foddi, C. Cabula, A. Tarquini. *Institute of Surgery and Medical Oncology University, 09100 Cagliari, Italy*

Stage III B breast cancer carries a high incidence of local and/or distant metastases reaching even 70% and with a 5-year overall survival of 20%. The present study was initiated to verify the effectiveness of a combined modality approach which includes primary chemotherapy, surgery, radiation and adjuvant therapy, in improving prognosis. Forty-four pts in age from 36 to 71 years (median 51), PS 0–1, 21 premenopausal, with T<sub>4</sub> N<sub>1-3</sub> M<sub>0</sub> breast carcinoma, following the tru-cut biopsy for the histology and prognostic factors, were treated by 3–5 cycles of q 21 or q 14 FEC 50 or 120–100 mg/m<sup>2</sup> Epirubicin or MMM. 13 pts were ER+, 9 PgR+, 9 Ki-67 L.I.+, 24 G<sub>2</sub>, 20 G<sub>3</sub>, 32 infiltrating ductal, 8 lobular, 4 mixed. *Clinical response*: of 42 evaluable pts 1 (2.4%) reached a CR, 25 (59.5%) a PR > 50%, 14 (33.3%)

a PR < 50% and 2 (4.8%) a NC. *Surgery* was performed in 40 pts (95.2%), radical in 37 pts (92.5%) and conservative in 3 pts (7.5%). Moreover all pts received radiation and adjuvant chemotherapy. *Pathological response* (40 pts) was pT<sub>0</sub> in 2 pts (5%), pT<sub>1</sub> in 5 (12.5%), pT<sub>2</sub> in 17 (42.5%), pT<sub>3</sub> in 6 (15%) and pT<sub>4</sub> in 10 (25%). Lymph nodes were involved in 40/40 pts, 1–3 in 11 pts (27.5%), 4–10 in 16 pts (40%), > 10 in 13 (32.5%). Response (CR + PR > 50%) not significantly correlate with ER status (50% ER+, 66.6% ER-). Of 42 pts, 23 relapsed (54.8%) (3 local, 9 distant, 11 mixed) and 12 of these (28.6%) died. None of the pts who achieved a CR relapsed while no significant difference in relapsing was found between those with PR > 50% and with less than PR. Kaplan-Meier 60 months overall and disease-specific-survival were 38.26% and 31.74% respectively. Since our study demonstrates the efficacy of the primary chemotherapy in making technically resectable the 95.2% of pts, the combined modality approach, even if could improve the outlook of many pts, it do not significantly betters the poor prognosis of these patients suggesting that more effective systemic therapies, including high-dose chemotherapy with PBPC need to be evaluated.

#### PP-8-15 Phase II Studies with Rivizor® (Vorozole) in Advanced Breast Cancer

M. Piccart\*, J.A. Roy. *Institut Jules Bordet, Brussels, Belgium*

Rivizor® (vorozole) is an orally active, potent and selective, non-steroidal aromatase inhibitor. In DMBA-induced rat mammary tumors the reduction in tumor growth with vorozole was equal to oophorectomy. *In vivo* peripheral aromatization in postmenopausal women was inhibited by at least 93%.

Four phase II trials were performed with vorozole in a total of 114 patients. Patients had ER +ve or ER-unknown tumours, measurable disease, and failed prior tamoxifen as adjuvant or as first-line therapy for advanced disease. Previous adjuvant chemotherapy was allowed. Performance status had to be 0–2. Vorozole was given at a dose of 2.5 mg OD p.o. until progression. Response was assessed by UICC criteria every 2 months. 114 patients were evaluable for toxicity and 107 patients were evaluable for response. 29 patients responded to vorozole (26%, 5 CR, 24 PR), for a median duration of 11.7 months (min 8.6–max. 15). Responses occurred more frequently in soft tissue disease. Serum oestradiol was suppressed significantly (90%). Vorozole did not affect adrenal function as assessed by ACTH stimulation test; there were no effects on androgens, progesterone or TSH. Vorozole was very well tolerated; toxicities were mild and consisted mainly of hot flushes, nausea and anorexia.

A phase III programme comparing vorozole to aminoglutethimide and megestrol acetate is ongoing.

#### PP-8-16 Detection of Liver Metastases in Advanced Breast Cancer

A.P.B. Vinholes\*, R.E. Coleman. *YCRC Dept. of Clinical Oncology, Weston Park Hospital, Sheffield, England*

The routine use of imaging tests to identify liver metastases is disputed and in some centres imaging is only performed in those patients with abnormal liver function tests (LFTs) — AST, ALT and GGT. We have reviewed 65 consecutive patients with advanced breast cancer who had both liver ultrasound scans and LFTs performed. In 43 patients the scan was performed as part of routine restaging and in 22 because of a suspicion of liver involvement due to either clinical features (n = 15) or abnormal LFTs (n = 7). 29 scans (45%) were diagnostic of liver metastases, with 25 showing multiple lesions and 4 a single metastasis. LFTs were abnormal in 21 (positive predictive value = 0.72) but 8 patients (31%) with liver metastases had normal LFTs. Conversely in 36 patients with a normal scan, LFTs were normal in only 18 (negative predictive value = 0.5). The median survival from detection of liver metastases was 5 (range 0.1–34) months. We believe ultrasound scans should be part of routine restaging of patients with advanced breast cancer prior to any change in systemic therapy and that imaging of the liver should not be restricted to patients with abnormal LFTs or clinical features of liver involvement.

#### PP-8-17 Biochemical Markers of Bone Resorption Predict Response to Bisphosphonate Treatment

I. Vinholes\*, O. Purohit<sup>1</sup>, R. Eastell<sup>2</sup>, R. Coleman<sup>1</sup>. <sup>1</sup> YCRC Dept. of Clinical Oncology, Weston Park Hospital, <sup>2</sup> Dept. of Human Metabolism & Clinical Biochemistry, Northern General Hospital, Sheffield, England

Around one half of patients experience symptomatic response with pain relief following intravenous pamidronate but the mechanisms which underly a lack of response are unknown. In a randomised placebo-controlled