83% vs 72%; premenopausal 42% vs 43%. Delay on 2nd cycle delivery observed in 20% (5.6 days) vs 15% (3.62 days,p=0.7), on 3rd cycle 11% (5.3 days) vs 23% (7.8 days, p=0.04), on 4th cycle 9%(6 days) vs 23% (7.5 days, p=0.02); however need for dose reduction = cycle 2: 11% vs 4% (p=0.1), cycle 3: 11% vs 5% (p=0.2) and cycle 4: 13% vs 4% (p=0.06). Response rate for arm A vs arm B: CR 36% vs 38% (p=0.7), PR 39% vs 49% (p=0.1), SD 21% vs 5% (p=0.003). Toxicity: more than 75% of delivered cycles in both arms had Grade 0-2 neutropenia and thrombocytopenia: stomatitis and diarrhea were mild and similar in both arms, with only 6 events of grade 3 mucositis (one in arm A and 5 in arm B). Nausea and vomiting were reasonable controlled with setrones in all patients. Non cardiac event was informed. Hospitalization due to complications 4 pts vs 6 pts. Median follow up 20 months. Disease free survival 18.7 months vs 21.1 months (p=NS), median overall survival 19.9 months vs 20.7 months (p=NS). Conclusions: neoadjuvant FEC with high dose of Epirubicin compared with standard Epirubicin dose improves overall tumor response (87% vs 75%) but was not statistically different. Results on overall and disease free survival are also similar as far. Intensification of Epirubicin in FEC regimen with G-CSF support is feasible and safe, and a potential further benefit in overall and disease free survival can not be discharged with a longer follow up.

630 POSTER

Influence of systemic therapy on the persistence of occult metastatic cells in bone marrow of breast cancer patients

W. Janni[1], B. Strobl[1], D. Rjosk[1], C. Kentenich[1], F. Hepp[1], C. Schindlbeck[1], H. Sommer[1], S. Braun[2]. [1] *LMU Munich, I. Frauenklinik, Munich, Germany;* [2] *TU Munich, Frauenklinik, Munich, Germany*

Background: The presence of occult metastatic cells in bone marrow (BM) of breast cancer patients at the time of diagnosis indicates occult hematogenous tumor cell dissemination and increases the risk of subsequent distant disease. Currently, there are no data available on the influence of different adjuvant therapies on the survival of these cells.

Methods: We analyzed bone marrow aspirates of 161 patients without evidence of recurrenceat the time of primary diagnosis and a median interval of 13 months (range: 6 - 74) thereafter. Carcinoma cells were detected using a standardized immunoassay with monoclonal antibody A45-B/B3 directed against cytokeratin (CK).

Results: At the time of primary diagnosis, 46 of 161 patients (29%) had apositive BM finding. Of these, 45 (28%) had a positive BM finding at the time of the second BM analysis. Among those patients with an initially negative BM finding, 21 patients (13%) had a positive BM finding at the second aspiration, while 24 patients (15%) remained BM-positive. Of the 46 patients with ITC at the time of primary diagnosis, 23 patients (50%) received adjuvant chemotherapy, 7 patients (15%) received endocrine therapy and 16 (35%) patients had no systemic treatment at all. 56% of the patients without systemic therapy (n=7) converted to a negative BM status at time of follow-up examination, while 43% of the patients with endocrine (n=4) or cytostatic (n=13) therapy became negative (P= 0.70).

Conclusion: In a considerable number of patients with primary breast cancer, minimal residual disease can be detected by follow-up BM analysis. Independently of systemic therapy, about half the patients are remain BM-positive suggesting failure of therapy and risk of subsequent development of distant disease.

631 POSTER

Weekly high-dose paclitaxel(HD-P) has significant antitumor activity in inflammatory breast cancer (IBC)

M. Cristofanilli[1], T. Fratarcangeli[2], F. Esteva[3], M. Rosales[4], D. Booser[5], N. Ibrahim[6], L. Pusztai[7], R.C. Bast Jr[8], E. Rivera[9], G.N. Hortobagyi[10]. [1] *The University of Texas M.D. Anderson Cancer Center, Breast Medical Oncology, Houston, USA;* [2] *The University of Texas M.D. Anderson Cancer Center, Breast Medical Oncology, Houston, USA;* [3] *The University of Texas M.D. Anderson Cancer Center, Breast Medical Oncology, Houston, USA;* [4] *The University of Texas M.D. Anderson Cancer Center, Breast Medical Oncology, Houston, USA;* [5] *The University of Texas M.D. Anderson Cancer Center, Breast Medical Oncology, Houston, USA*

IBC is a rare but aggressive, often fatal form of breast cancer. Anthracycline-based regimens are the standard of treatment for IBC. The quality of response to induction chemotherapy (IC) still represents the most important prognostic factor. We have shown that the use of paclitaxel (225 mg/m2 given as 3hr IV infusion) in anthracycline-resistant IBC was associated with improved resectability that translated in a median survival of 46 months (95% C.I., 36 to 56 months) (submitted for publication).

Based on this premises a pilot study was designed to test the possibility to achieve a high pathological and/or clinical complete remission (CR) rate with an intense IC program before proceeding to local treatment. IC consisted of a sequential treatment with an anthracycline-based regimen (FAC) for 4 cycles, weekly HD-P (175 mg/m2 weekly x 6 consecutive weeks, 8-week cycle) for 2 cycles and, in case of chemotherapy-refractory disease, high-dose chemotherapy with peripheral blood stem cell support (HDC-PBSCS). Twenty patients (pts) were enrolled between 10/98 and 8/00; the median age was 52 years (range 34-63). One patient was ineligible, 19 pts were eligible. The median follow-up is 18 months (range 8-30). Eighteen pts have completed IC, 1 patient refused treatment. A clinical CR was achieved in 6/18 pts (34%). Three pts underwent HDC-PBSCS. Local treatment consisted of combined chemo-radiotherapy (weekly paclitaxel 50 mg/m2) for 3 pts, 11 of them underwent mastectomy and one refused surgery. Five of these 11 were found to have achieved a pathologic CR (5/11, 45%). Two patients have progressed; the median time-to progression (TTP) is 16+ months (range 10-22). Neurosensory and skin toxicity grade 3-4 were paclitaxel dose-related and required dose-modifications.

In conclusion, the use of sequential FAC-HD-P appears to be associated with a promising antitumor activity when used as IC in IBC.

632 POSTER

Hypofractionated and accelerated radiotherapy with amifostine cytoprotection (HypoARC) for high-risk breast cancer patients

M.I. Koukourakis[1], C. Kouroussis[2], S. Kakolyris[2], A. Giatromanolaki[1], E. Sivridis[1], C. Frangiadaki[2], G. Retalis[1], V. Georgoulias[2]. [1] *Democritus University of Thrace, Radiotherapy/Oncology and Pathology, Alexandroupolis, Greece;* [2] *University Hospital of Heraklion, Medical Oncology, Heraklion, Greece*

Purpose: Post-mastectomy radiotherapy in high risk breast cancer patients reduces the risk of local relapse by 20-30%. However, a 'wait and see'; policy is often adopted as surgical therapy alone is successful in up to 70% of mastectomized patients and 5-10% of patients will experience a recurrence of the disease despite radiotherapy. Establishment of short, still safe and effective RT regimens would render adjunctive radiotherapy more appealing. We evaluated the toxicity and the efficacy of a Hypofractionated and intensively Accelerated RT regimen supported with amifostine Cytoprotection (HypoARC) in a cohort of 72 high-risk breast cancer patients treated with modified mastectomy or conservative surgery and anthracycline based chemotherapy.

Patients and Methods: High-dose of amifostine, 1000mg, was given as a 5min iv infusion before each one of 12 consecutive fractions (f) of RT (3.5Gy/fraction x 4f and 4Gy/f x 8f; 1 f/day, 5 f/week). The breast or the chest-wall as well as the supraclavicular and axillary areas were included in the RT fields. The follow-up of patients ranges from 18-42 months (median 28).

Results: Ninety-two % of patients successfully completed the regimen, the only side effects being mild nausea and asthenia. In 7% of patients amifostine was interrupted because of a rash/fever reaction. A dramatic reduction of the acute skin toxicity was noted. Acute pneumonitis, as well as late toxicity from breast, chest-wall, axillary and lung tissues in the HypoARC regimen were lower, although not significantly, than the toxicity observed in two matched control cohorts treated with standard fractionation. Both HypoARC and standard RT significantly reduce the local relapse rate, while the distant metastasis-free and overall survival times remained unaffected. However, in cases with a high cancer cell proliferation index (MIB1), HypoARC was associated with a significantly better local control rate.

Conclusions: The HypoARC regimen is convenient for both the patients and the radiotherapy departments. The regimen is well tolerated and shows a significantly better profile in terms of early toxicity, while a reduced rate of late sequel may be expected. The overall local control rate is comparable to the expected from conventional RT. Translational studies are on-going to identify sub-groups of patients, where HypoARC may prove more effective than standard RT.