

the anti-cytokeratine-antibody A45-B/B3 (Micromet, Munich, Germany), directed against cytokeratins 8, 18 and 19, and immunohistochemically staining with neu-fuchsin. All preparations were screened by two independent persons.

Results: 328 breast cancer patients were analyzed at primary diagnosis. Among those, 133 patients returned for a second blood sampling after completion of adjuvant chemotherapy. Most of the tumors were small (43% pT1, 51% pT2, 4% pT3, 1% pT4) but of intermediate or unfavourable grade, (G1 4%, G2 46%, G3 42%). 66% of the patients were node-positive (34% pN0, 38% pN1, 20% pN2, 8% pN3) and a positive hormone receptor status was seen in 71%. In 22% the Her2-status was positive. MRD in peripheral blood was found in 31% of all patients before and in 9% after chemotherapy. The mean number of detected cells was 2 (range 1–9). 87.2% of patients who showed MRD at the first measurement turned negative after chemotherapy.

Neither tumor size ($p=0.624$), lymph node metastases ($p=0.450$), histopathological grading ($p=0.168$), hormone receptor status ($p=0.270$) or Her2/neu-status of the primary tumor ($p=0.893$) correlated with the presence of MRD.

Conclusions: The detection of MRD in peripheral blood can be widely used and is suitable for repeated measurements. Further follow-up will show, if this method can be used for risk stratification and monitoring of treatment efficacy in adjuvant breast cancer.

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ORAL

Improved chemotherapy delivery in breast cancer patients receiving pegfilgrastim primary prophylaxis compared with current practice neutropenia management – results from an integrated analysis (NeuCuP)

M. Aapro¹, M. Schwenkglenks², G. Lyman³, A. Lopez-Pousa⁴, V. Easton⁵, T. Skacel⁶, G. Von Minckwitz⁷. ¹Imo – Clinique de Genolier, Institut Multidisciplinaire d'Oncologie, Genolier, Switzerland; ²University of Basel, European Center of Pharmaceutical Medicine, Basel, Switzerland; ³University of Rochester, James P Wilmot Cancer Center, Rochester, USA; ⁴Hospital Sant Pau, Department of Medical Oncology, Barcelona, Spain; ⁵Amgen Ltd, Biostatistics, Cambridge, United Kingdom; ⁶Amgen (Europe) GmbH, Medical Affairs Department, Zug, Switzerland; ⁷University of Frankfurt, German Breast Group GBG Forschungs GmbH, Frankfurt, Germany

Background: Chemotherapy (CT) dose reductions and delays due to neutropenia or febrile neutropenia (FN) may worsen clinical outcomes. FN prophylaxis with granulocyte colony stimulating factor (G-CSF) can help to maintain planned CT dosing schedules. Recent EORTC/ASCO guidelines recommend routine growth factor primary prophylaxis (PP) for patients with overall $\geq 20\%$ FN risk. An aim of this integrated analysis of individual patient data was to assess CT delivery in breast cancer patients receiving a range of CT regimens supported by PP pegfilgrastim or any G-CSF according to current practice (CP).

Methods: Studies involving breast cancer CT regimens with moderate (15–20%)/high ($\geq 20\%$) risk of FN were identified by literature review. For this integrated analysis, individual patient data were available from 8 clinical trials and 3 observational studies (conducted 1998–2005) involving these regimens and PP use of pegfilgrastim (6 mg dose in all cycles) or CP neutropenia management (no G-CSF or pegfilgrastim/daily G-CSF in any cycle). Outcome measures reported here are CT dose delays/reductions, hospitalizations, and anti-infective use.

Results: 2282 patients were analyzed (PP: 1303; CP: 979). The mean age (\pm SD, years) was 51.4 ± 10.4 for PP vs 52.0 ± 9.9 for CP; 28% vs 28% of patients had Stage IV disease, 97% vs 85% had ECOG status 0–1 (11% missing in CP) and 30% vs 37% had prior chemo/radiotherapy. The most common regimens were docetaxel (37% vs 50%), TAC (31% vs 27%), and Adoc (27% vs 3%). In cycle 1, 75% of CP patients did not receive any G-CSF, 12% received pegfilgrastim, and 12% received various daily G-CSF regimens (11% of whom had <5 doses, 50% had an unspecified number of doses). Dose delays/reductions for the PP and CP groups are shown in the table, as well as hospitalizations and anti-infective use.

	PP, % patients (95% CI) (n = 1303)		CP, % patients (95% CI) (n = 979)	
	Overall	Cycle 1	Overall	Cycle 1
Dose delay >3 days in any cycle	15 (13, 17)	N/A	16 (14, 19)	N/A
Dose reduction $\geq 15\%$ in any cycle	9 (7, 10)	N/A	24 (21, 27)	N/A
FN-related hospitalization	4 (3, 5)	3 (2, 4)	10 (8, 12)	6 (5, 8)
Use of anti-infectives ^a	42 (40, 45)	22 (20, 25)	55 (52, 58)	43 (40, 46)

^a210 PP and 248 CP pts were prescribed prophylactic antibiotics in original protocol.

Conclusions: In this analysis of patients receiving CT with moderate/high FN risk, PP pegfilgrastim supported a higher level of CT delivery than CP neutropenia management. PP pegfilgrastim also reduced the number of FN-related hospitalizations.

Poster presentations (Wed, 26 Sep, 14:00–17:00) Breast cancer – early disease

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POSTER

Weekly docetaxel vs CMF as adjuvant chemotherapy for elderly breast cancer patients: safety data from the ELDA trial

F. Nuzzo¹, F. Perrone², V. Labonia¹, C. Pacilio¹, A. Gravina¹, G. D'Aiuto³, G. Signoriello⁴, G. Landi⁵, M.C. Piccirillo⁶, A. de Matteis⁵. ¹National Cancer Institute of Naples, Medical Oncology C, Naples, Italy; ²National Cancer Institute of Naples, Clinical Trials Unit, Naples, Italy; ³National Cancer Institute of Naples, Senology, Naples, Italy; ⁴Second University of Naples, Department of Medicine and Public Health, Naples, Italy; ⁵National Cancer Institute of Naples, Medical Oncology C, Naples, Italy; ⁶National Cancer Institute of Naples, Clinical Trials Unit, Naples, Italy

Background: We are conducting a phase 3 study to compare weekly docetaxel vs CMF as adjuvant treatment of elderly breast cancer patients (the ELDA trial, cancertrials.gov ID: NCT00331097). An amendment has been approved in December 2006 to modify methotrexate dose according to creatinine clearance. We have compared safety data collected before the amendment.

Patients and Methods: early breast cancer patients, 65 to 79 years old, are eligible if they have metastatic lymphnodes or average to high risk of recurrence according to 2001 St.Gallen criteria, PS 0–2, adequate bone marrow, renal and hepatic function. Patients are randomly assigned to CMF (cyclophosphamide 600 mg/m², methotrexate 40 mg/m², fluorouracil 600 mg/m², days 1–8) or docetaxel (35 mg/m² days 1–8–15), both every 4 weeks.

Results: data of 101 patients enrolled up to October 2006 were analysed: 53 in the CMF and 48 in the docetaxel arm. Median age was 70 years. At least one grade 3–4 toxic event of any type was reported in 40 (75.5%) and 19 (39.6%) patients with CMF and docetaxel, respectively (exact $p=0.0002$). Grade 3–4 hematological events were observed in 37 (69.8%) vs 4 (8.3%) cases (exact $p<0.0001$) and grade 3–4 non-hematological toxicity in 12 (22.6%) vs 15 (31.2%) patients (exact $p=0.11$), with CMF and docetaxel, respectively. In particular, a significantly higher incidence of anemia, neutropenia, thrombocytopenia and febrile neutropenia was reported in CMF arm. Among non-hematological toxicity, constipation, mucositis, nausea and vomiting were significantly more common with CMF; diarrhoea, abdominal pain, dysgeusia, neuropathy and liver toxicity were significantly more frequent in docetaxel arm. No significant interaction was found between severe toxicity and baseline variables, including creatinine clearance and geriatric assessment.

Conclusions: in the present analysis, weekly docetaxel was less toxic than CMF. Efficacy data must be awaited to draw conclusions on the role of adjuvant weekly docetaxel for elderly early breast cancer patients.

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POSTER

NEAT-A: Accelerated sequential epirubicin followed by higher dose 14 day CMF, using pegfilgrastim, is a feasible alternative for delivering dose dense E-CMF chemotherapy in early breast cancer

S. Bowden¹, L. Gross¹, C.J. Poole¹, L. Hiller², R.K. Agrawal³, K.F. McAdam⁴, H.M. Earl⁵, S. Anwar⁶, D. Rea⁷. ¹University of Birmingham, CR UK Clinical Trials Unit, Birmingham, United Kingdom; ²University of Warwick, Medical School Clinical Trials Unit, Coventry, United Kingdom; ³Shrewsbury and Telford Hospital NHS Trust, Department of Oncology, Shrewsbury, United Kingdom; ⁴Peterborough District Hospital, Oncology, Peterborough, United Kingdom; ⁵Addenbrooke's Hospital, Oncology Centre, Cambridge, United Kingdom; ⁶Queen Elizabeth Hospital, The Cancer Centre, Birmingham, United Kingdom; ⁷University of Birmingham, The Cancer Centre, Birmingham, United Kingdom

Background: E-CMF [epirubicin (E) \times 4 cycles every (q) 21 days (d), followed by either classical CMF \times 4 cycles q 28d or higher dose CMF q 21d] is established as highly effective adjuvant chemotherapy for early breast cancer (EBC), reducing mortality by 30% compared with CMF alone [Poole NEJM 2006]. Dose dense anthracycline-taxane schedules, accelerated with GCSF support, have been shown to be superior to conventional regimens [Citron JCO 2003, Burnell SABCS 2006]. Exploration of accelerated E-CMF is therefore of considerable interest. We