Table 1. Prognostic factors in stage II breast carcinomas compared with 5-year survival

Prognostic factors	Univariate		Multivariate	
	RR (95% CI)	p	RR (95% CI)	p
p53+	3.71 (1.17–11.77)	0.026	0.67 (0.17–2.67)	0.57
Inadequate anthracyclines dose	4.54 (1.22–16.89)	0.024	5.19 (1.19–22.57)	0.028
ER-	4.68 (1.02–21.45)	0.047	4.38 (0.79–3.373)	0.091

38LBA LATE BREAKING ABSTRACT

Therapy monitoring of sorafenib effect on experimental prostate carcinomas by dynamic contrast-enhanced MRI

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Background: To investigate and quantify the effects of the multikinase inhibitor sorafenib on experimental prostate carcinomas in rats by dynamic contrast-enhanced MRI assays of endothelial permeability and tumor vascularity.
Methods and Materials: 16 Copenhagen rats implanted with subcutaneous prostate carcinoma allografts (MLLB-2) were imaged at baseline and after a one-week treatment course of sorafenib via gavage by dynamic MRI at 3.0T following enhancement with a prototype macromolecular contrast agent [albumin-(Gd-DTPA)]. Quantitative MRI estimates of tumor microvessel permeability (transfer constant K^{PS}, 10^{-3} min^{-1}) and tumor vascular richness (blood volume; %) were calculated with PMI 0.4 software based on a two-compartment kinetic model.
Results: Sorafenib significantly suppressed endothelial permeability and blood volume in prostate carcinoma allografts over the treatment course of one week. In sorafenib-treated tumors (n = 8) the transfer constant K^{PS} yielded a significant decrease in endothelial permeability from baseline to day 7 (baseline K^{PS} = 0.62±0.20, day 7 K^{PS} = 0.08±0.09; p < 0.01). The blood volume in sorafenib-treated tumors decreased significantly over the treatment course (baseline BV = 5.1±1.0, day 7 BV = 0.56±0.48; p < 0.01). In the control tumors without treatment (n = 8), neither the transfer constant nor the blood volume changed significantly.
Conclusion: Sorafenib, a known inhibitor of angiogenesis in renal and liver cancer, significantly reduced endothelial permeability and tumor vascularity in a prostate cancer model as assayed by dynamic MRI enhanced with macromolecular contrast media. Dynamic MRI enhanced with macromolecular contrast media could prove valuable for monitoring the anti-angiogenic effect of sorafenib on an individual patient basis.

39LBA LATE BREAKING ABSTRACT

Preoperative serum CA 15−3 and CEA in women with breast cancer and their relationship with relapse of the disease

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Background: The aim of this retrospective study was to investigate whether the preoperative CA 15−3 and CEA serum levels are able to predict patients who may have a shorter disease free survival interval after curative surgery in women with breast cancer (BC).
Materials and Methods: We retrospectively reviewed a series of 363 consecutive postmenopausal women (median age 63 years, range 47−89 years) with pT1−2, N0−1 BC who were followed-up for at least 36 months after lumpectomy or mastectomy. Two Groups of patients were considered: Group 1 (age 47−64 years), 203 (55.9%) patients; Group 2 (age >64 years), 160 (44.1%) patients. The greater diameter of the tumor (pT) did not differ between Groups (19.9±13.6 vs. 22.7±14.0 mm, p = 0.06), while the preoperative CA 15−3 and CEA serum levels were higher in older patients: 19.0±14.3 vs. 24.9±27.3 U/L (p = 0.01), and 2.7±8.5 vs. 4.8±11.0 ng/mL (p = 0.04), respectively.
Results: During follow-up (36−60 months) 62 (17.1%) patients developed relapse (DR) of the disease (41 and 20 among Groups 1 and 2, respectively), while 301 (82.9%) were disease-free (DF). Group 1: baseline CA 15−3 serum levels: (DF) 25.0±11.4 (DF) vs. (DR) 31.4±14.6 U/L (p = 0.003); baseline CEA serum levels: (DF) 5.9±4.8 vs. (DR) 7.4±6.4 ng/mL (p = 0.099). Group 2: baseline CA 15−3: (DF) 27.3±13.2 vs. (DR) 20.4±6.5 U/L (p = 0.023); baseline serum CEA levels: (DF) 6.6±5.2 vs. (DR) 3.7±2.5 ng/mL (p = 0.015).
Conclusions: Surprisingly, in the subgroup of older patients with relapse (DR), both CA 15−3 and CEA serum levels were lower than in the subgroup of disease-free patients (DF). We conclude that, although serum tumor markers levels should be useful during follow-up, their baseline levels are not useful in predicting relapse in elderly patients with BC.

40LBA LATE BREAKING ABSTRACT

Results of an RCT investigating the cost-effectiveness of four follow-up strategies after breast cancer

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Background: The cost-effectiveness of frequent follow-up (f-up) visits after treatment for breast cancer is debated. Therefore, we conducted a multicenter RCT (ISRCTN 74071417) to determine the costs and effects of four f-up strategies, investigating hospital f-up, nurse-led telephone f-up, and an educational group program (EGP).
Method: Between 2005 and 2008, 320 breast cancer patients were randomized into one of four f-up strategies for their first year after treatment: 1. hospital f-up; 2. nurse-led telephone f-up; 3. hospital f-up with EGP; 4. nurse-led telephone f-up with EGP. The EGP consisted of two group-sessions, led by a breast care nurse and health psychologist, in which physical and psychosocial sequelae of diagnosis and treatment were discussed.
Costs and effects of the four f-up strategies were compared to determine the most cost-effective strategy. Costs were calculated from a societal perspective, thus included healthcare costs (e.g. outpatient clinic visits, laboratory tests, diagnostic imaging), patient costs, and productivity losses. Effects were expressed as quality-adjusted life-years (QALYs), measured by the EQ-5D. Data were collected at baseline, three, six, and 12 months after treatment. Non-parametric bootstrapping with 1000 replications and one-way sensitivity analyses were used to assess the uncertainty in costs and effects.
Results: Nurse-led telephone f-up with EGP (f-up strategy 4) was the cheapest and most effective f-up strategy. Mean annual costs per patient were €3003 and this strategy yielded 0.771 QALYs. Mean annual costs per patient and mean effects for hospital f-up (f-up strategy 1) were €3603 and 0.750 QALYs. Mean costs and effects for nurse-led telephone f-up (f-up strategy 2) were €3933 and 0.766 QALYs, and for hospital f-up with EGP (f-up strategy 3) €3281 and 0.746 QALYs. Hence, in the incremental cost-effectiveness analysis, nurse-led telephone f-up with EGP dominated all other f-up strategies. Uncertainty analysis showed that the probability of this dominance ranged between 62& and 70% for different QALY threshold values. Furthermore, sensitivity analyses with a range of cost prices for hospital visits (€50−200) and telephone f-up (€10−50) showed that cost-effectiveness results were robust.
Conclusion: Nurse-led telephone f-up with an educational group program is the most cost-effective f-up strategy out of four different f-up strategies for the first year after breast cancer.

41LBA LATE BREAKING ABSTRACT

Single institute phase II study of weekly cisplatinum and metronomic dosing of endoxan and methotrexate in second line metastatic breast cancer triple-negative

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Background and Introduction: Triple negative breast cancer is a disease prevalent in developing countries and non caucasian population. There is no standardized treatment options available include using combination chemotherapy with biologics, novel drugs results of which are of limited overall survival at prohibitive costs. This study involves the use of weekly cisplatinum with metronomic dosing of cyclophosphamide and intermittant methotrexate.