Results: During follow-up 41 patients developed a local recurrence, of which 35 were isolated events at the time of diagnosis. The 5-year actuarial local recurrence rates for the three patient groups are presented in the Table. Despite their more favourable tumour stage, the patients undergoing M without RT had a significantly higher risk of local recurrence than the patients undergoing M with radiotherapy. A multivariate analysis, taking into account differences in tumour size, nodal status, age and adjuvant systemic treatment between the patient groups, showed that the local recurrence risk was almost 3 times lower for the patients undergoing M with RT than for the patients who underwent M without RT (HR: 0.35; 95% CI: 0.13−0.94). The risk of local recurrence in patients undergoing L with RT was not affected by the presence of positive surgical margins, neither in the univariate analysis nor after adjustment for age, tumour stage and adjuvant systemic treatment.

Table. 5- and 8-year actuarial local recurrence rates in patients with invasive lobular breast cancer (Kaplan–Meier method) according to treatment

Follow-up	Treatment					
	L with RT (n = 416)		M with RT (n = 172)		M without RT (n = 217)	
	%	(95% CI)	%	(95% CI)	%	(95% CI)
5-years	3.5	(2.5−4.5)	2.0	(0−4.4)	9.1	(4.9−13.3)
8-years	6.4	(4.7−8.0)	4.0	(0−8.6)	9.8	(5.4−14.2)
P-value (logrank)	L+RT vs. M with RT: P = 0.44		L+RT vs. M without RT: P = 0.03		M without RT vs. M with RT: P = 0.02	

M = mastectomy; L = lumpectomy; RT = radiotherapy.

Conclusions: Patients with invasive lobular breast cancer whose surgical treatment is followed by radiotherapy have a very low risk of local recurrence. This low risk of local is considered to be a reflection of high sensitivity of lobular carcinoma to radiation. Radiotherapy techniques may also have become more accurate and effective in eradicating microscopic disease.

289 Poster Discussion

Long-term cosmetic changes after breast conserving therapy for patients with stage I and II breast cancer treated in the EORTC "boost versus no boost" trial

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Background: A 16 Gy boost dose results in a better local control but also negatively affects early cosmetic outcome after breast conserving therapy for early breast cancer (Vrieling e.a., Int. J. Radiation Oncology Biol. Phys. 1999; Bartelink e.a., J. of Clinical Oncology 2007). The purpose of this study is to investigate the change in cosmesis 3-, 6- and 9 years after treatment.

Material and Methods: We collected pictures of the breasts from patients participating in the "Boost versus no Boost" trial treated in Tilburg and Utrecht. In this trial pictures were made before radiotherapy and every three years during follow-up. Digitalized pictures were analyzed using specific software (BCCT.core) that enables quantification of seven features (pBRA = change in nipple position, pLBC = change in level of lower breast contour, pUNR = change in nipple level, pBCE = change in distance from nipple to inframammary fold, pBCD = change in length of breast contour, pBAD = change in area of the breast, pBOD = change in non overlapping area between left and right breast), all associated with fibrosis (Cardoso e.a., Artif Intell Med 2007). Changes in the size of the treated breast were quantified and both breasts were compared. We performed a multivariate analysis on the results of these measurements.

Results: We retrieved 1403 sets of photographs from 347 patients with a minimum follow-up of 6 years: 169 randomized to the no boost-arm, 178 to the boost-arm. A continuous increase in time for all seven features was noted. The cosmetic outcome worsened more in the boost- than in the no boost-arm. The difference of the evolution between the two arms was statistically significant for pBRA, pLBC, pUNR, pBCD, and pBOD. In the multivariate analysis, using features representing the most relevant changes of size and shape of the breast (pBRA, pLBC, pBOD), applying a boost, postoperative complications and a maximum dose of >55 Gy in the border plane for whole breast irradiation were significantly associated with a worse cosmetic outcome.

Conclusions: We noted a significant worsening with time after treatment for 5 of the 7 features used for measuring changes in cosmetic results after breast conserving therapy for early breast cancer. In the multivariate analysis boost treatment, postoperative complications and a maximum dose of >55 Gy for whole breast irradiation were significantly associated with worsening of the cosmetic outcome during follow-up up to 9 years.

Thursday, 17 April 2008 12:30–14:30

POSTER SESSION

Locally advanced and recurrent disease

290 Poster

Clinical activity of the novel epothilone B analog, ixabepilone, in triple negative breast cancer (BC) patients

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Background: Despite advances in BC treatment, many women experience progressive disease secondary to primary or acquired resistance, which may occur from the earliest stage of disease. Ixabepilone, a semi-synthetic analog of epothilone B, is the first member of a new class of antineoplastic agents, developed to have less susceptibility to tumor resistance mechanisms. Patients (pts) with ER/PR/HER2-negative (triple-negative, TNeg) BC has an aggressive clinical course with significant risk of systemic relapse and subsequent poor prognosis, TNeg BC patients have fewer treatment options than those with receptor-positive tumors. We report activity of ixabepilone in several settings of BC in the triple negative sub-set patient population.

Material and Methods: Ixabepilone has been administered as monotherapy, 40 mg/m^2 iv over 3h on day 1 q 3 wks, as well as at the same dose in combination with capecitabine, 2000 mg/m^2 po on days 1−14.

Data on triple negative sub-set are presented from 5 phase II studies including neoadjuvant and metastatic BC (MBC) setting and from a phase III trial of pts with anthracycline/taxane-resistant MBC.

Objectives: response rate (ORR), progression free survival (PFS) and main adverse events (AEs) were reviewed.

Results: See the tables.

In all studies from neoadjuvant to heavily pretreated metastatic disease, the safety profile was comparable between TNeg and Non-TNeg pts., neuropathy was mostly sensory, cumulative and reversible (incidence of G3 ranged from 3% in the neoadjuvant population to 21% in anthracycline/taxane-pretreated disease).

Conclusion: Ixabepilone has consistently demonstrated antitumor activity in patients with TNeg BC, both as monotherapy and in combination with capecitabine, from neoadjuvant to multiple resistant MBC.

Phase II	Status	N	ORR %	pCR %
Neo-adj (080) n = 161	TNeg	42	64%	26%
	No- TNeg	119	60%	15%
Taxane resistant MBC (009) n = 49	TNeg	18	6%	
	No- TNeg	31	16%	
Taxane pretreated MBC (010) n = 65	TNeg	11	55%	
	No- TNeg	65	39%	
TAC resistant MBC (081) n = 126	TNeg	42	12%	
	No- TNeg	84	11%	

* evaluated by Independent Radiological Committee.
TAC, Taxane–anthracycline–capecitabine.