

disease-free survival (DFS) and distant recurrence-free interval (DRFI) was demonstrated and here we report the results after 8 years median follow-up. Following the 2005 results, the treatment assignment was unblinded for patients randomized to Tam alone, and over one-quarter of these patients opted to receive Let. The other three arms remain blinded.

Methods: 8010 patients were randomized to the trial. 57% of patients had node-negative (N-) disease and 25% received chemotherapy (13% of N- and 43% of N+). The monotherapy comparison includes patients randomized to Tam × 5 yrs (Tam5) or Let × 5 yrs (Let5). The sequential treatment comparison includes patients randomized to Let5, Tam × 2 yrs followed by Let × 3 yrs (Tam2-Let3), or the reverse (Let2-Tam3). Cox models and Kaplan-Meier estimates with inverse probability of censoring weighting (IPCW) are used to adjust for selective crossover in the Tam5 arm.

Results: This update includes 2074 DFS events compared with 1569 at the prior protocol-specified update two years ago. Compared with Tam5, Let5 significantly improved DFS, overall survival (OS), and DRFI. 8-year estimates for Let5 vs Tam5 were 76% vs 72% for DFS and 85% vs 81% for OS. All monotherapy comparisons are also statistically significant ($P < 0.05$) using the intent-to-treat analysis. Results for the sequential comparisons to Let5 are in the table.

Comparison	N	DFS			OS			DRFI		
		HR	95% CI	P	HR	95% CI	P	HR	95% CI	P
Let5 vs Tam5	2463 2459	0.82	0.74–0.92	0.0002	0.79	0.69–0.90	0.0006	0.79	0.68–0.92	0.003
Tam2-Let3 vs Let5	1548 1546	1.07	0.92–1.25	0.36	1.10	0.90–1.33	0.36	1.23	0.99–1.52	0.06
Let2-Tam3 vs Let5	1540 1546	1.06	0.91–1.23	0.48	0.97	0.80–1.19	0.80	1.14	0.92–1.42	0.24

Conclusions: At a median follow-up of 8 years, for postmenopausal women with endocrine-responsive early breast cancer, adjuvant endocrine treatment with Let5 has superior disease control and overall survival compared with Tam5. Let5 tends to be superior to Tam2-Let3, especially for control of distant recurrence among patients at higher risk of early relapse. Let2-Tam3 had similar outcome to Let5.

5017 POSTER DISCUSSION Efficacy of Endocrine Therapy Regimens in Major Histological Subtypes of Breast Cancer – a TEAM Study Analysis

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Introduction: Individual targeted breast cancer therapy is developing rapidly. Studies on adjuvant chemotherapy suggest different efficacy based on breast cancer subtypes, with ductal breast carcinomas more likely to respond to chemotherapy than their lobular counterparts. Similar efficacy of adjuvant endocrine therapy (ET) in ductal and lobular carcinoma has been reported. However, data on the efficacy of different adjuvant endocrine therapy regimens by histological subtypes is still lacking. The aim of this study was to assess efficacy of two ET regimens in infiltrating ductal (IDC) and lobular carcinomas (ILC).

Methods: 9,766 women were randomized to exemestane 25 mg once-daily for 5 years or tamoxifen 20 mg once-daily for 2.5–3 years, followed by exemestane 25 mg once-daily for 2.5–2 years in the Tamoxifen Exemestane Adjuvant Multinational (TEAM) trial. Histological subtype was locally assessed. Disease free survival (DFS) was defined as time from randomization to the earliest documentation of disease relapse or death from any cause. Relapse free period (RFP) was defined as time to earliest documentation of disease relapse or death due to breast cancer.

Results: 7231 patients with ILC (n=1126) and IDC (n=6105) were included in the present analysis. Patients with ILC were older ($p = 0.004$), and more often had larger tumours, unknown tumour grade, and axillary lymph node involvement (all p values < 0.001). In ILC patients, univariate DFS and RFP were similar in both treatment arms ($p = 0.361$; $p = 0.384$ respectively). In IDC patients, DFS and RFP were also similar for both arms ($p = 0.824$; $p = 0.452$ respectively). Additional analysis confirmed no interaction between randomization and histological subtype ($p = 0.389$; $p = 0.632$ respectively).

Discussion: The present study did not demonstrate different efficacies in endocrine therapy regimens for tumour subtypes. With the growing interest in patient-tailored treatment, it is essential to establish individual benefits from targeted therapies.

Table 1. Disease free survival (DFS) and relapse free period (RFP)

	% 5 y survival	HR (95% CI)	p value
DFS			
Ductal			0.824
T-E	86	1 (reference)	
E	86	1.01 (0.89–1.51)	
Lobular			0.361
T-E	82	1 (reference)	
E	83	0.88 (0.67–1.15)	
RFP			
Ductal			0.452
T-E	98	1 (reference)	
E	98	0.94 (0.81–1.10)	
Lobular			0.384
T-E	96	1 (reference)	
E	98	0.87 (0.63–1.20)	

T: tamoxifen; E: exemestane.

5018 POSTER DISCUSSION No Effect of Adjuvant Chemotherapy on the Prognosis of Hormonally Treated Postmenopausal Women With Pure or Mixed Type Lobular Breast Cancer

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Background: The effect of adjuvant chemotherapy in addition to hormonal therapy on the prognosis of postmenopausal women with breast cancer was analyzed by primary histology, including invasive ductal carcinoma (IDC), pure invasive lobular carcinoma (ILC) and mixed type ILC.

Material and Methods: All women with primary non-metastatic invasive breast cancer from ductal, pure lobular or lobular-mixed origin, aged 50 to 69 years who were diagnosed in the period 1995 to 2008 were selected from the database of the Netherlands Cancer Registry. Patients were divided in two groups: those who received hormonal therapy only versus hormonal therapy in combination with adjuvant chemotherapy. Cox proportional hazards analyses were carried out to determine the impact of chemotherapy in addition to hormonal treatment, for each histological entity separately and interaction between use of chemotherapy and histological type was tested.

Results: In total 19,937 patients with IDC, 3,733 patients with pure ILC and 1,398 patients with mixed type ILC were included. Patient groups were comparable with respect to the use of adjuvant systemic treatment. Among the patients with IDC a significant difference in ten-year overall survival was observed between patients treated with hormonal therapy only, versus hormonal therapy combined with chemotherapy (68% vs. 74%, $p < 0.001$). In contrast, this effect was not observed in patients with pure ILC (67% vs. 66%, respectively, $p = 0.86$) or mixed type ILC (73% vs. 67%, respectively, $p = 0.33$). The hazard ratio (HR) for death among the patients with IDC receiving chemotherapy in addition to hormonal treatment was 0.70 (95% CI, 0.64–0.76, $p < 0.0001$), as compared to those receiving hormonal treatment alone. In patients with pure or mixed type ILC, however, these HR's were 1.00 (95% CI, 0.82–1.21, $p = 0.97$) and 0.98 (95% CI, 0.70–1.33, $p = 0.83$), respectively. A statistically significant interaction was observed between the use of adjuvant chemotherapy and histological tumour type. In a model including patients with ILC and IDC, the p -value for interaction was 0.01 and in a model including patients with mixed-type ILC and IDC the p -value for interaction was 0.004.

Conclusions: Postmenopausal patients with ILC have an inferior response to adjuvant chemotherapy as compared with IDC and actually do not benefit from this additional therapeutic modality. Patients with mixed type ILC seem to behave in a similar way as those with pure ILC. Guidelines dictating the administration of adjuvant chemotherapy in pure ILC and mixed type ILC should be revised in order to prevent chemotherapy-related morbidity and lower costs.