

(95% CI 6.48–7.56) and 6.94 y (95% CI 6.39–7.49) respectively; log rank analyses didn't find significant differences ( $p = 0.94$ ). Tertile evaluation of extracted lymph node had overlapped CI for DFS or OS, and log rank analyses didn't find significant differences ( $p = 0.73$ ) for lower and upper tertiles (table 1). Power to detect a significant difference with this sample size was 0.9999.

Table 1

Features	Lower Tertile	Upper Tertile
Age	55.64	53.19
Conservative Surgery	56.67%	57.94%
T1	48.31%	38.40%
T2	51.69%	61.60%
N1	60%	50%
N2	40%	50%
Ductal	91.11%	84.92%
Lobular	6.67%	10.32%
Medullar	2.22%	0.79%
Lum A	21.25%	27.19%
Lum B	48.75%	40.35%
HER2+RE+	12.50%	14.04%
HER2+RE-	8.75%	7.89%
TN	8.75%	10.53%
No Adj Chemotherapy	12.64%	5.93%
Adj Anthracyclines	51.72%	48.31%
Adj with Anthrac and Taxanes	21.84%	26.27%
Adj Trastuzumab	5.19%	2.65%
DFS	7.69 (7.28–8.1)	7.82 (7.39–8.25)

**Conclusions:** Our results show no benefit for extensive axillary lymphadenectomy over more conservative axillary evaluation.

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#### Clinical and Histopathology Characteristics of Invasive Breast Carcinoma in Patients With Diabetes Mellitus

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**Background:** Patients with diabetes mellitus (DM) have an increased risk of breast carcinoma (BC) and higher risk of cancer-related mortality in comparison to patients without DM. Possible cause for higher risk of cancer related death is under-treatment of patients with DM. However, there are only limited data in the literature about the pathomorphological characteristics of BC in patients with DM. The aim of our retrospective study was to compare characteristics of BC in patients with DM and without DM. **Patients and Methods:** Altogether 174 patients with DM (mean age 67, range 38–93 years), were surgically treated because of invasive BC at our institution from 2006–2010. Control group consisted of consecutive 316 patients with invasive BC without DM (mean age 59, range 28–86 y.), who were surgically treated at the same institution in 2006. A chart review of all 490 patients was performed. Data on clinical and histopathology characteristics (age, BMI, tumour diameter, TNM tumour stage, number of metastatic lymph nodes, presence of estrogen (ER) and progesterone receptors (PR), HER-2 status), cancer specific treatment and survival were collected. Characteristic were compared in patients with and without DM by chi-square test and non-parametric statistical analysis.

**Results:** Patients with DM were older than patients without DM ( $p < 0.001$ ), had larger mean BMI (29.9 vs. 26.3;  $p = 0.007$ ), larger mean tumour diameter (2.37 vs. 2.15 cm;  $p = 0.015$ ) and higher tumour stage (T1/T2: 78% vs. 88%; T3/T4: 22% vs. 12%;  $p = 0.001$ ). Patients with DM in comparison to patients without DM had no statistical difference in the rate of regional (46% vs. 47%) or distant metastases (3% vs. 2%) or in mean number of metastatic lymph nodes (2.5 vs. 3), respectively. Tumours in patients with DM were more often positive for ER (89% vs. 82%) and PR (76% vs. 66%) than in patients without DM ( $p < 0.05$ ). Tumours were HER2 positive in patients with and without DM in 12.5% and 18.6% ( $p = 0.086$ ), respectively. Patients with DM were more often treated with hormones and less often with chemotherapy than patients without DM ( $p < 0.013$ ). There was no statistical difference in rate of lymphadenectomy or treatment with trastuzumab or cancer-specific survival between both groups of patients.

**Conclusion:** The patients with BC and DM are older, have larger BMI, larger tumour and higher tumour status in comparison to those without

DM. There was no difference with regard to dissemination of tumour in both groups of patients.

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#### Early Breast Cancer and Cosmetic Outcome One, Two, Three and Four Years After Intra-operative Radiotherapy Compared With External Beam Radiotherapy: an Objective Assessment of Patients From a Randomised Controlled Trial (on Behalf of the TARGIT Trialists' Group)

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**Background:** The international randomised controlled TARGIT Trial (ISRCTN 34086741) was designed to determine non-inferiority between the risk-adaptive approach of TARGIT [intra-operative radiotherapy with IntraBeam® (Carl Zeiss, Germany)] and conventional external beam radiotherapy (EBRT) in women with early breast cancer. The primary endpoint is risk of local relapse within the treated breast. We report here data from a sub-protocol assessing cosmesis in 114 women over 50 years participating in the TARGIT Trial from one centre (Perth, Australia).

**Material and Methods:** Frontal view digital photographs from were assessed, blind to treatment, using specialist software (BCCT.core 2.0, INESC Porto, Portugal) which produces a composite score based on symmetry, colour and scar. Statistical analysis was by generalised estimating equations (GEE) on all of the data, and logistic regression analysis at year 1.

**Results:** Images from 114 patients have been assessed, 59 and 55 randomised to IORT and EBRT, respectively. Median age at randomisation was 62 years (IQR 56 to 68). Photographs were taken at baseline (before surgery) and one, two, three and four years after initial breast conserving surgery; none had subsequent breast surgery. The results were dichotomised into Excellent and Good (EG), and Fair and Poor (FP). There was a non-significant 45% increase in the odds of having an outcome of EG for patients in the TARGIT group relative to the EBRT group (OR=1.45, 95% CI 0.78–2.69,  $p = 0.245$ ) after adjusting for tumour size. The results were similar when adjusted for tumour grade and age of the patient. For year 1 only there was a statistically significant 2.35 fold increase in the odds of having an outcome of EG for patients in the TARGIT group relative to the EBRT group (OR=2.35, 95% CI 1.02–5.45,  $p = 0.047$ ) after adjusting for age of the patient, tumour size and grade.

**Conclusions:** These results demonstrate a significantly better cosmetic outcome with TARGIT compared to EBRT in the first year after surgery.

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#### Use of Complementary and Alternative Medicine by Women With Breast Cancer in the Netherlands

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**Background:** Complementary and alternative medicine (CAM) use is common in breast cancer patients. Several studies have shown interactions between natural CAM products and conventional cancer treatment. The aim of this study was to determine the prevalence and predictors of use of CAM by breast cancer patients in the Netherlands, and to explore the association between CAM therapy use, quality of life (QOL), trust in conventional therapies, and health specific locus of control.

**Material and Methods:** A questionnaire assessing the use of CAM, focusing on the use of natural products, was sent to a cohort of 167 breast cancer patients from a University Medical Center in the Netherlands within a week after diagnosis. Clinical variables were obtained from medical records.

Descriptive statistics, t-tests and logistic regression analyses were conducted.

**Results:** The response rate was 34.1%. Of the 57 respondents 45.6% was using natural product CAM. The most common reason to use CAM was to stimulate the immune system, and the pharmacist or a drugstore was the most common source of information. 74.7% did not report CAM use to the physician, with 'it is not important to discuss CAM' being the most common reason. 80.6% of the CAM users thought CAM to be effective.