

studies should explore the effect of inpatient stay for breast surgery on the provision of adjuvant treatments, particularly using prospective studies to investigate any impact on cosmesis.

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POSTER

### Long Term Results and Prognostic Factors in Patients With Unicentric and Multicentric Breast Cancer

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**Background:** Among many oncologists the opinion exists, that multicentric breast cancer (MBC) shows greater metastatic dynamics and has worse prognosis comparing to unicentric breast cancer (UBC) in the same TNM. Some researchers think that proper evaluation of pT in MBC should be based on combined diameters not on the largest diameter of tumour. The aim of the work is estimation of the treatment results with regard of multicentricity in breast cancer.

**Material and Methods:** The retrospective analysis included 954 consecutive women with breast cancer in stage IA-IIIC after radical mastectomy treated between 1995–1998 at the Cancer Center in Warsaw. Adjuvant chemo- or hormone therapy received 449 (47%) and 262 (27%) of patients respectively. Two hundred forty three (26%) of patients had not been given systemic treatment. Postsurgical irradiation was performed only in 135–14% of patients. Cox's regression model was used to analyse the prognostic factors having influence on disease-free survival (DFS) and overall survival (OS). Median of follow-up was 134 months.

**Results:** MBC was diagnosed after mastectomy in 104 (10.9%) of patients. There were no significant differences in characteristics between UBC and MBC groups according to age, stage, pT, pN, type and grade of histology and methods of adjuvant treatment. The 10-year actuarial DFS and OS for patients with UBC and MBC were 51%, 62% and 58%, 72% respectively (Log Rank  $p > 0.05$ ). Locoregional recurrence rates were higher in UBC than in MBC: 78/850 (9.2%) vs 7/104 (6.7%) of patients  $p = 0.03$ . There were no statistical significant differences in frequencies of lymph nodes metastases among groups with UBC and MBC according to pT – measured as greatest diameter. In multivariate logistic regression analyses the following classical prognostic factors had independent influence on DFS and OS: pN, pT, G, and vascular invasion –  $p < 0.01$ . Multicentricity of breast cancer did not appeared significant prognostic factor neither for DFS and OS –  $p > 0.1$ .

**Conclusions:** From present retrospective analysis results that MBC does not deteriorate of prognosis compare to UBC and the largest rather than combined diameters of multicentric lesions should be used to establish pT what is recommended and concordant with TNM system. However, multicentricity breast cancer should be considered at postsurgical radiotherapy planning because it can have influence on improvement of locoregional control.

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### Sentinel Node Biopsy Following a Preoperative Diagnosis of Ductal Carcinoma in Situ (DCIS) in the Management of Screen Detected Cancer

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**Background:** Sentinel node biopsy has an essential role in the prognostication of invasive breast cancer. The procedure's role following a preoperative diagnosis of in situ breast cancer (DCIS) is controversial. Although a proportion of preoperatively diagnosed DCIS is subsequently determined to be invasive, these tumours tend to be small and the incidence of metastatic disease in this setting is vanishingly small.

**Aims:** The aims of this study were to describe the incidence of invasive breast carcinoma following therapeutic surgery for screen detected DCIS and to identify factors that may predict areas of invasion, thus facilitating the performance of a sentinel node procedure at initial surgery. The incidence of metastatic disease was also recorded.

**Methods:** All patients diagnosed with DCIS on core biopsy pre-operatively following screening mammogram from January 2002 to August 2010 were identified from a prospectively maintained national breast screening database. The dataset was interrogated for patient demographics, and tumour radiological and histopathological features.

**Results:** In total there were 783 patients diagnosed with DCIS during the study period, 74% (n=576) of which had an axillary procedure Overall

there was a reported incidence of subsequent invasion on pathological assessment of surgical specimens of 25.3% (n=198). On logistic regression, features that were associated with an increased incidence of subsequent invasion were large mammographic size, ( $p < 0.003$ ), palpable mass, ( $p < 0.05$ ), and age  $> 55$ , ( $p < 0.02$ ). The overall rate of positive axillary lymph nodes was 4.7%, (n=37). Multivariate analysis of features found to be statistically significant for nodal disease in this series were clinically palpable mass ( $p < 0.04$ ) and increasing patient age ( $p < 0.03$ ).

**Conclusions:** Sentinel lymph node assessment is not indicated in all cases of screen detected DCIS. There are preoperative characteristics that are predictive of invasion at therapeutic resection, however the low rate of nodal disease in this series would suggest that sentinel node could be avoided even with operative confirmation of invasion.

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POSTER

### The Prognostic Value of Tumour-stroma Ratio in Triple Negative Breast Cancer

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**Background:** Triple-negative cancer constitutes one of the most challenging groups of breast cancer given its aggressive clinical behaviour, poor outcome and lack of targeted therapy. Until now, profiling techniques have not been able to distinguish between patients with good and poor outcome. Recent studies suggested an important role for stroma in tumour growth and progression. In colorectal-, oesophageal- and breast cancer, the tumour-stroma ratio was found to be of prognostic value.

**Objective:** To evaluate the prognostic value of the tumour-stroma ratio in triple-negative breast cancer.

**Methods:** During the period January 2004–2008, 124 consecutive triple negative breast cancer patients treated in our hospital were retrospectively evaluated. Routine Haematoxylin-Eosin (H&E) stained histological sections were evaluated by two investigators (kappa 0.735) for stroma percentage, growth pattern (pushing margin), necrosis and amount of lymphocytic infiltrate. Patients with less than 50% stroma were classified as stroma-low and patients with  $\geq 50\%$  stroma were classified as stroma-high.

**Results:** Of 124 triple-negative breast cancer patients, 50 (40%) had a stroma-high and 74 (60%) had a stroma-low tumour. Survival analysis revealed a 5 years relapse free period (RFP) of 85% in the stroma-low and 45% in the stroma-high group. Overall survival (OS) was 89% for stroma-low and 65% in the patients with a stroma-high tumour. Both RFP and OS were significantly worse in patients with stroma-high tumours compared to stroma-low. In a multivariate cox-regression analysis, tumour stroma remained an independent prognostic variable for RFP (HR 2.39; 95% CI 1.07–5.29;  $p = 0.033$ ) and OS (HR 3.00; 95% CI 1.08–8.32; 0.034) when corrected for other clinical-pathological variables.

**Conclusion:** Tumour-stroma ratio is a strong independent prognostic variable in triple-negative breast cancer. It is easy to determine, reproducible (kappa 0.735) and can be easily incorporated into routine histological examination. This parameter optimizes risk stratification and could be target for future therapies.

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### Segmental Resection in the Early Breast Cancer Treatment

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**Background:** Conservative surgery is accepted as a treatment of choice for the vast majority of patients with early breast cancer. Standard management of axilla in invasive breast carcinoma is axillary dissection, which provides both treatment and information on nodal status. Nonetheless, this procedure is responsible for functional sequelae, mainly arm edema. At present, the percentage of involved nodes is decreasing because diagnosis of breast cancer is made earlier, and the benefit of this surgery is in question.

**Purpose:** The main aim is to study efficacy of segmental resection without axillary dissection in patients with early breast cancer.

**Patients and Methods:** Between January 1988 and December 2008 101 patients with early breast cancer from Ulyanovsk Oncology Center were assigned to segmental resection without axillary dissection. This group included the patients, who refused to receive radical mastectomy or breast conservative surgery with axillary dissection, patients with hard intercurrent