

all results when a patient had an appointment with a doctor), there was still room for further improvement on other aspects (for example regarding the time between actual diagnosis and surgery).

**Conclusions:** Patients' ratings of quality of care overall remained stable between the period before and after implementation of the short stay programme. Although newly introduced patient education on postoperative treatment-related aspects was insufficient. We conclude that a breast cancer care programme in short stay can be introduced with, on average, similar quality of care as perceived by the patient. Specific care aspects were identified that require continued attention.

## 258

Poster

### Evaluation of radioactive seed versus radio guided localization in breast conserving surgery after primary systemic therapy

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**Objective:** To analyze the use of Radioactive Seed Localization (RSL) as an alternative to Radio Guided Occult Lesion Localization (ROLL) in operative excision of non palpable breast tumors after Primary Systemic Treatment (PST).

**Methods:** Retrospective analysis of 114 patients treated with PST between 2003 and 2009 in the Netherlands Cancer Institute. Inoperable patients (T4, N3) were excluded. The majority of patients (70%) were initially treated with doxorubicin and cyclophosphamide and participated in two randomized studies in which anthracycline and taxane based regimens were compared. Since 2005 HER2-positive patients received chemotherapy in combination with trastuzumab. Till the end of 2007, breast lesions were marked with a twist markers prior to systemic treatment. Since June 2007 radioactive iodine seeds were placed to mark the tumor burden before the start of PST. The decision to perform breast conserving surgery was based on the radiological response on MRI and the patients preference.

**Results:** From 2003 till November 2009, 114 patients with breast tumors after PST were treated with breast conserving therapy. In 80 patients breast conserving surgery was performed with the use of ROLL and in 34 patients with the use of RSL. Additional surgery was required because of irradical resection in 9% (7/80) and 11% (4/34), respectively. These differences are not statistical significant. The overall pCR rate was 26% (21/80) in the group of patients treated with the ROLL and 43% (13/30) in the group of patients treated with RSL.

**Conclusion:** RSL is comparable with ROLL in terms of tumor free margins in patients that were treated with breast conserving therapy after PST. The RSL method reduces scheduling conflicts for surgery since no radiologic localization is needed anymore prior to surgery. Therefore, RSL is an attractive method for localizing breast tumors before primary systemic treatment and has essentially replaced the traditionally placed twist marker in our tertiary-care medical center.

## 259

Poster

### The MARI procedure; Mapping of the Axilla with Radioactive Iodine seeds

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**Background:** An important benefit of neoadjuvant chemotherapy (NAC) is the increase in breast-conserving surgery. At present the response of axillary lymph node metastases to chemotherapy cannot be accurately assessed. Therefore axilla-conserving therapy is not a benefit. We aimed to assess a new surgical method to evaluate the axillary response: the MARI procedure which stands for Mapping of the Axillary lymph node with Radioactive Iodine seeds.

**Material and Methods:** Prior to NAC, proven tumour-positive axillary lymph nodes were ultrasound guided localized with Iodine-125 seeds in 15 patients. After NAC, the marked lymph nodes were selectively removed

with the use of a gamma-detection probe. A complementary axillary lymph node dissection was performed to assess if pathological response in the marked node was indicative for the pathological response in the additional lymph nodes.

**Results:** Tumour-positive axillary lymph nodes were successfully localized with Iodine-125 seeds in 15 patients. The marked lymph node (MARI-node) was surgically detected and selectively removed after NAC in all patients. The pathological response to chemotherapy in the MARI-node was indicative for the overall response in the additionally removed lymph nodes. Nine patients with macrometastases in the MARI-node had macrometastases in their complementary axillary lymph node dissection specimen. Two patients with isolated tumour cells in the MARI-node showed residual micrometastases in an area of reactive fibrosis in the complementary axillary lymph node dissection. Four patients with a tumour-negative MARI node also had a pathological complete remission of the additionally removed axillary lymph nodes.

**Conclusions:** This study shows that marking and selectively removing metastatic lymph nodes after NAC is feasible. The tumour-response in the marked lymph node may be used to tailor further axillary treatment, and herewith makes axilla-conserving surgery an potential treatment after neoadjuvant chemotherapy.

MARI-node Size metastasis	Complementary axillary lymph node dissection			Response MARI node indicative
	Number removed	Number tumour-positive	Size largest metastasis	
1 Macrometastasis	27	3	Macrometastasis	Yes
2 Macrometastasis	18	2	Macrometastasis	Yes
3 Macrometastasis	19	1	Macrometastasis	Yes
4 Macrometastasis	20	17	Macrometastasis	Yes
5 Macrometastasis	11	2	Macrometastasis	Yes
6 Macrometastasis	10	3	Macrometastasis	Yes
7 Macrometastasis	28	3	Macrometastasis	Yes
8 Macrometastasis	25	25	Macrometastasis	Yes
9 Macrometastasis	15	1	Macrometastasis	Yes
10 Isolated tumour cells	19	1	Isolated tumour cells	Yes
11 Isolated tumour cells	24	2	Micrometastasis	Yes
12 Complete remission	30	0	Complete remission	Yes
13 Complete remission	40	0	Complete remission	Yes
14 Complete remission	9	0	Complete remission	Yes
15 Complete remission	23	0	Complete remission	Yes

## 260

Poster

### Comparative study of lymphoedema with axillary dissection level I-II versus axillary dissection level I-III in patients undergoing breast radical surgery

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**Introduction:** Breast cancer related lymphoedema is a chronic debilitating complication. Our aim was to compare the incidence of lymphoedema in two groups of patients undergoing axillary dissection; one undergoing axillary dissection level I-II, and the other undergoing axillary dissection level I-III.

**Material and Methods:** Retrospective review of records of two sequential groups of patients treated in surgical clinic Nis between 2004 and 2006. Both groups had minimum of 2 years follow-up.

**Results:** Two hundred and twelve patients were included in Group 1 and 104 in Group 2. The incidence of lymphoedema in Group 1 was 7.7% compared to 11.5% in Group 2. This was statistically significant with a P value <0.001. In the node-positive patients, the incidence of lymphoedema in Group 1 was 12.2% compared to 14.4% in Group 2, although the differences were not statistically significant with P = 0.28.

**Conclusions:** The incidence of lymphoedema in the axillary group with dissection level I-III was higher, although the differences were less pronounced in the node-positive patients. The effectiveness of radiotherapy as an alternative to full axillary dissection among patients with positive nodes is currently under investigation in randomised controlled trials.

## 261

Poster

### Reasons why women do not undergo immediate breast reconstruction and estimation of accuracy of predicted need for chest wall radiotherapy

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**Background:** NICE guidelines recommend that immediate breast reconstruction (IBR) should be "discussed with all patients who are being advised to have a mastectomy, and offer it except where significant co-morbidity or (the need for) adjuvant therapy may preclude this option". The aim of this study was to examine the reasons why patients do not undergo IBR, and in particular to determine how accurate the multidisciplinary team (MDT) are at predicting the need for adjuvant chest wall radiotherapy.