not yet proven evidence regarding oncological impact of conservative management of the axilla following NCAT.
Aim: To analyse current practice regarding axillary management post NCAT in a single unit during 2016-17.
Method: Retrospective observational study of breast cancer patients treated with NCAT during 2016-17 in a single unit. The primary outcome was to analyse our surgical management of the axilla post NCAT
Results: Out of 177 patients treated with NCAT, 130 had proved positive axilla (posA), 74% at diagnosis whilst 47 (26%) were negative. In the latter, 45 patients underwent an initial sentinel node biopsy (SNB) post NCAT from whom 5 patients needed further Axillary Clearance (ANC). Average nodes retrieved was 4.4 (1-11) using dual technique.
In the posA group, 74 (56%) patients had an initial SNB from whom 20 (15%) required further ANC. The other 52 (40%), had just primary ANC. Therefore, the number of patients who avoided ANC in this group was 54 (42%). The distribution of triple negatives and Her2 positives patients in our series was 49 (28%) and 67 (38%) respectively.
Conclusions: Ninety-four (54%) patients out of the total 177 were managed with SNB as a primary axillary surgical treatment post NACT, whereas 54 (42%) avoided ANC. That result is encouraging to engage in more controlled studies to support this conservative approach in selected patients.

P012. THE ROLE OF SENTINEL LYMPH NODE BIOPSY IN PLANNING ADJUVANT CHEMOTHERAPY FOR ELDERLY WOMEN WITH LOW RISK BREAST CANCER

Vivienne Blackhall, Martina Bugelli, Nick Abbott, Russell Mullen. *Highland Breast Centre, NHS Highland, Inverness, United Kingdom*

Background: Sentinel lymph node biopsy (SLNB) guides the delivery of adjuvant chemotherapy in breast cancer. Elderly patients (≥70 years) may not be candidates for chemotherapy due to poor performance status. Additionally, omitting SLNB in elderly patients with early breast cancer may not affect survival. In patients who are unlikely to receive chemotherapy, SLNB may therefore be unnecessary.
Aims: To determine whether SLNB in elderly patients (≥70 years old) with low-risk breast cancer informs adjuvant chemotherapy.
Methods: This was a retrospective review of a prospectively maintained database from 2013-2017 at Raigmore Hospital, Inverness. Patients with low-risk unilateral breast cancers undergoing SLNB were included. Basic demographics were recorded. Fisher's exact test compared the difference between the proportion of women with a positive SLNB offered chemotherapy in the younger (<70 years) and older (≥ 70 years) groups.
Results: The study included 492 patients. Median age was 63 years; 137 patients (27.8%) were aged ≥70 years. Eighty-nine patients had a positive SLNB; 73 (82.0%) were < 70 years old and 16 (18.0%) were ≥ 70. Of elderly patients with a positive sentinel node, only 5 were offered chemotherapy (31.2%). In the younger group, most women were offered chemotherapy (89%). There was a statistically significant difference in the proportion of node positive women receiving chemotherapy in the two age defined cohorts ($p<0.0001$).
Conclusions: Elderly women with node positive, low-risk breast cancers are less likely to be offered chemotherapy when compared with younger patients, suggesting that the use of SLNB in elderly patients could be rationalised.

P013. MAGNETIC SEEDS: AN ATTRACTIVE LOCALISATION OPTION FOR THE MANAGEMENT OF AXILLARY NODE POSITIVE BREAST CANCER

Victoria Sinnett[1], Katherine Krupa[1], Robin Wilson[1], Aikaterini Micha[1], Amy Godden[1], Peter Barry[1], Steven Allen[2], Fiona MacNeill[2], Jennifer Rusby[1]. [1] *The Royal Marsden NHS Foundation Trust, Sutton, United Kingdom;* [2] *The Royal Marsden NHS Foundation Trust, London, United Kingdom*

Introduction: There are 2 indications for accurate removal of a previously identified, involved lymph node: 1) after neoadjuvant chemotherapy (NACT) to ensure that the index node is assessed (targeted axillary dissection), and 2) for women with 1 or 2 abnormal nodes on imaging who may be eligible for sentinel node biopsy (SLNB) as per POSNOC. Dual localisation has an unacceptable false negative rate in the former and marking of the index node is advised. Although a node can be marked prior to NACT, finding that node poses a challenge.
Magnetic seed localisation (eg with Magseed) allows for accurate excision of impalpable breast lesions and may also solve the issue of node identification. We aimed to assess the feasibility of Magseed insertion into axillary nodes and accuracy of surgical removal.
Methods: A prospective pilot study of 9 patients was undertaken between August and November 2018. Data collected included details of radiology and surgical procedures, clinician satisfaction and pathological outcome.
Results: Radiologists reported that the Magseed was easy to insert under ultrasound guidance into the target node (mode 4 out of 5). Eight patients have undergone surgery, 3 after NACT, all with successful removal of the seed and the surgeons were also satisfied (mode 4 out of 5). In all cases the relevant node was identified.
Conclusions: Magseed insertion into malignant axillary lymph nodes is feasible and identification of the Magseed node at surgery straightforward. Further evaluation is required to establish utility in facilitating axillary conservation surgery in node positive breast cancer.

P014. COMPARISON OF AXILLARY NODE SAMPLING AND SENTINEL LYMPH NODE BIOPSY BEFORE AND AFTER THE INTRODUCTION OF SENTIMAG® MAGNETIC TRACER TECHNOLOGY

Bahar Mirshekar Syahkal[1], Mina Girgis[1], Edward Fletcher[1], Mamie Liu[2], Balendra Kumar[1], Eamonn Coveney[1], Jane Aitken[1]. [1] *West Suffolk Hospital, Bury St Edmunds, United Kingdom;* [2] *Broomfield Hospital, Chelmsford, United Kingdom*

Introduction: Sentinel lymph node biopsy (SLNB) is the accepted standard for assessing the axilla in breast cancer patients with clinically node-negative disease. In the absence of a dual technique to identify sentinel nodes, four-node axillary sampling (ANS) should be performed, however increased nodal excision is associated with increased morbidity. In April 2017 our unit changed its practice from blue dye-assisted ANS to SLNB using blue dye and Sentimag®. The aim of this study was to evaluate the effects of this change following completion of a six month learning period.
Methods: A service evaluation project was registered with our Trust to perform a retrospective case notes analysis of all breast cancer patients undergoing axillary staging surgery for one year pre-Sentimag® (01/04/2016 to 31/03/2017) and post-Sentimag® (01/10/2017 to 30/09/2018).
Results: 347 axillary staging procedures were performed in total (Table 1). The commonest reasons for not using Sentimag® were previous surgery (13/161 patients) and poor renal function (6/161 patients). 7/134 (5%) SLNB procedures failed (no tracer detected). Significantly fewer lymph nodes were removed using SLNB than ANS (median 2 vs 3; Mann Whitney $p<0.0001$); there was no significant difference in the number of axillary node clearances (15/134 vs 21/213; Fisher's exact test $p=0.72$).
Conclusions: SLNB using blue dye and Sentimag® instead of ANS is appropriate for the majority of patients requiring axillary staging and may reduce axillary morbidity by reducing the number of lymph nodes removed. Sentimag® provides an excellent non-radioactive alternative for SLNB.

Table 1
Axillary staging methods used per- and post-Sentimag.

	SLNB:Blue dye AND Sentimag®	ANS:Blue dye	ANS:Sentimag®	ANS:No tracer	Total
Pre-Sentimag®	-	185 (99%)	–	1 (1%)	186
Post-Sentimag®	134 (83%)	23 (14%)	1 (1%)	3 (2%)	161
Total	134	208	1	4	347

P015. OUTCOMES FOLLOWING NEOADJUVANT CHEMOTHERAPY FOR BREAST CANCER: PATHOLOGICAL RESPONSE IN THE AXILLA

Ross McLean[1], Henry Cain[2], Alexander Frost-Younger[1], Petros Amorginos[1], Mark Verrill[3], Nicola Cresti[3], Sunil Amonkar[1], Andrew Pieri[2]. [1] *Queen Elizabeth Hospital, Gateshead, United Kingdom;* [2] *Royal Victoria Infirmary, Newcastle-Upon-Tyne, United Kingdom;* [3] *Northern Centre for Cancer Care, Newcastle-Upon-Tyne, United Kingdom*

Introduction: Neoadjuvant chemotherapy (NAC) is used effectively in the management of breast cancer, and can downstage axillary disease. This

study aimed to evaluate downstaging of axillary disease in "real world" practice.
Methods: Retrospective data analysis from two breast screening institutions, including all patients with axillary disease, undergoing NAC between May 2014-November 2017. Positive axillary nodes were defined as the presence of macrometastases on pathology.
Results: A total of 136 patients were included, with 76 axillary node clearances (ANC, 55.9%), 25 axillary node dissections/sampling (18.4%) and 35 sentinel lymph node biopsies (SLNB, 25.7%). In the ER+/HER2- group, the complete pathological response (pCR) rate was poor at 19.2%. All other molecular subgroups had a pCR rate of >50%. Follow-on ANC were performed in 3 patients (2%) with positive SLNB and axillary radiotherapy was given to 49 patients (28%).

Table 1
Pathological Response Axilla, n(%)*

Hormonal Receptor Status	Complete pathological response	Partial pathological response	No response	Progression	*Total*
ER-/HER2-	18 (56.3)	7 (21.9)	6 (18.8)	1 (3.1)	32 (23.5)
ER-/HER2+	22 (66.7)	6 (18.2)	2 (6.1)	3 (9.1)	33 (24.3)
ER+/HER2-	5 (19.2)	12 (46.2)	5 (19.2)	4 (15.4)	26 (19.1)
ER+/HER2+	25 (55.6)	14 (31.1)	1 (2.2)	5 (11.1)	45 (33.1)
Total	70 (51.5)	39 (28.7)	14 (10.3)	13 (9.6)	136

*excluding patients with a negative axilla on radiology and negative on pathology
Conclusion: An excellent pathological response to NAC was seen for triple negative and HER2+ breast cancers. OncotypeDX testing may be of benefit in the ER+/HER2- cohort.

P016. CAN WE USE OSNA (ONE STEP NUCLEIC ACID AMPLIFICATION) ROUTINELY IN DCIS? – A SINGLE CENTRE STUDY

Uma Sridharan, Geraldine Mitchell, M.V. Chandrashekar, Yasmeen Mir. *Royal Liverpool and Broadgreen University Hospital, Liverpool, United Kingdom*

With DCIS, metastatic spread to the axillary lymph node is unusual but the assessment of sentinel node biopsy (SLNB) by OSNA has shown an increase in micrometastases. Our aim was to review how many patients with DCIS had a positive sentinel node.
Retrospective data from Jan 2005 to December 2016, 284 patients who had DCIS underwent SLNB were retrieved from hospital electronic records. SLNB was assessed by immunohistology until 2012 and from 2013 SLNB were assessed by OSNA and we compared the 2 cohorts.
Results:

		2005 – 2012 SLNB by immunohistology (220 Patients)	2013 – 2016 SLNB by OSNA (64 Patients)
Treatment	Mastectomy	133 (60.5%)	47 (73.4%)
	Wide excision	87 (39.5%)	17 (26.6%)
Grade	High	178 (80.9%)	52 (81.2%)
	Intermediate	40 (18.2%)	12 (18.8%)
	Low	2 (0.9%)	0
Size (mm)	<10	30 (13.6%)	8 (12.5%)
	11 – 20	38 (17.3%)	6 (9.4%)
	21 - 40	72 (32.7%)	22 (33.3%)
	>40	80 (36.4%)	28 (43.8%)
Microinvasion		69 (31.4%)	9 (11.7%)
SLN Status	Micro metastases	2 (0.9%)	14 (21.9%)
	Macro metastases	1 (0.5%)	0
Axillary Clearance		3 (1.4%)	3 (4.7%)

Conclusion: A significant increase in Micrometastasis with DCIS in the OSNA group No further nodal involvement in patients who had axillary clearance. OSNA can safely be used for DCIS and should not lead to overtreatment.

P017. ACCURACY OF PREOPERATIVE ULTRASOUND STAGING OF THE AXILLA A SINGLE INSTITUTE EXPERIENCE IN THE UK

Alaa Talaat, Elham Abdelaziz, Robert Jones, Adel Rashid. *United Lincolnshire Hospital Trust, Boston, United Kingdom*

Background: Axillary node status remains one of the most important prognostic factors in breast cancer. Ultrasound of the axilla is still the only way of accurately staging of the axilla. The aim of this study is to evaluate the accuracy of pre-operative staging of the axilla in patients with suspected or confirmed breast cancer using an ultrasound (USS) machine.
Methods: 142 female patients have been diagnosed with breast cancer between March 2018-August 2018. 55 (screen detected), 86 (symptomatic) and one patient (family history clinic). All patients subjected to USS and core biopsy of lymph node if suspicious. Ultrasound of the axilla using a 12-16 MHz matrix line array transducer on a Toshiba Aplio ultrasound platform. The nodal morphology was recorded, including whether the outline of the node was smooth, uni or multi-lobulated with normal or absent hilum. If the lymph node was >10 mm in maximum longitudinal dimension, then a biopsy was taken. If > one node was identified, the most morphologically abnormal node was selected for biopsy.
Result: Out of 142 newly diagnosed breast cancers, 42 abnormal lymph nodes were identified and patients had ALND. 100 patients underwent SLNB with normal preoperative axillary USS staging. Sensitivity 70%(56-80),specificity 90%(83-95), PPV 80%, NPV 83%, false positive 17%, and false negative 16%. Positive SNB (18), 6 invasion >10mm, 5 between 5-10mm, and 7<5mm.
Conclusions: In our practice, ultrasound is still the most acceptable modality for preoperative axillary staging with an acceptable false negative rate comparing to meta analysis.

P018. IMPACT OF NEOADJUVANT CHEMOTHERAPY ON AXILLARY TUMOUR BURDEN

Paran Kiritharamohan, Deepak Shrestha, Ruth James, Anup Vinayan, Lorraine D'Souza, Katharine Kirkpatrick, Duraisamy Ravichandran. *Luton and Dunstable University Hospital, London, United Kingdom*

Aim: Neoadjuvant chemotherapy (NAC) usually results in partial / complete eradication of cancer in the breast. We studied the impact of NAC on the axillary tumour burden in early breast cancer patients with node-positive axilla.
M & M: We studied the axillary outcome of patients diagnosed with node-positive axilla at the time of diagnosis by US-guided FNAC, and compared this between those who received NAC and those who had surgery first.
Results: 103 female patients were identified, 97 were suitable. One patient had bilateral node positive cancers. All had axillary clearance except 4 who had sentinel lymph node biopsy (SLNB). The baseline & outcome data is presented in the table below:

	Neoadjuvant Chemotherapy (n=48)	Surgery (n=49)
Median age (range)	54 (33-77)	65 (31-88)
Median primary tumour size on Ultrasound (mm) (range)	26 (7-50)	22.5 (0*-47)
Core biopsy histology		
Invasive Ductal	44	47
Invasive Lobular	4	2
Type of Surgery		
Mastectomy	25	30
Breast Conservation	23	19
Median no of nodes with macrometastases (range)	1 (0-29)	3 (0-59)
Median percentage of nodes with macrometastases (Number involved / Number removed) (range)	5 (0-95)	20 (0-100)
		*not seen on US