

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

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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 over-treatment.

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

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**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

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**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