examination. Micro was defined as tumour deposit between 0.2mm and 2mm and macro over 2mm on histology.
Results: 230 of 1255 patients (18%) proceeded to immediate AC and were spared a second operation. 183 patients (80%) were macro and 47 (20%) micro on Metasin. 9 of 1255 patients (0.7%) underwent a delayed AC as histology of SLNs showed macro. Out of these, 4 were negative and 5 were micro on Metasin. 38 of 43 Metasin micro patients (88%) were spared an axillary clearance.
Correlation of Metasin vs histology - immediate ACs

Histology / Metasin	Negative	Positivity in SLNs ONLY	Positivity in at least ONE N-SLNs	Total
Macrometastasis	43 (23.5%)	98 (53.5%)	42 (23%)	183
Micrometastasis	37 (78.7%)	8 (17%, micro)	2 (4.3%, micro)	47
Total	80	106	44	230

Conclusions: Differentiating between macro and micro helps decide appropriate surgical management of the axilla. Fewer patients with Metasin macro should have AC. Patients with Metasin micro should not have AC.

P004. INTRAOPERATIVE ASSESSMENT OF SENTINEL NODES IN MASTECTOMY PATIENTS

Jia Choong, Sadaf Jafferbhoy, Sekhar Marla, Soni Soumian, Sankaran Narayanan. *University Hospitals of North Midlands, Stoke-on-Trent, United Kingdom*

Introduction: Intraoperative sentinel node assessment was routinely offered to patients undergoing curative breast surgery with negative preoperative nodal status. Our previous audit showed 34% patients undergoing mastectomy had positive OSNA results. Axillary radiotherapy is now increasingly being offered to node positive patients with one or two positive sentinel nodes. The aim of this audit was to assess the rate of positive sentinel nodes in patients undergoing mastectomy.
Methods: A retrospective audit of patients who underwent mastectomy from January 2015 to December 2017 was carried out. Mastectomy patients were identified from the Somerset Cancer Database, operative details and axillary treatment was recorded from the electronic patients record and analysed.
Results: Of the 461 patients who underwent mastectomy, 183 patients underwent sentinel node biopsy and OSNA. Amongst the OSNA group, thirty five patients (19%) had positive sentinel node and underwent axillary clearance. Seventy one percent of these patients had only one or two positive nodes on final histology where axillary surgery could be avoided. On an average, only 3 patients per annum had more than 2 involved nodes on final histology who would benefit from further axillary treatment.
Conclusion: Majority of patients with OSNA detected positive sentinel nodes had low nodal disease burden which could be easily managed with radiotherapy rather than axillary clearance.

P005. AXILLARY RADIOTHERAPY IS NON INFERIOR TO COMPLETION AXILLARY CLEARANCE IN PATIENTS WITH POSITIVE SENTINEL LYMPH NODE BIOPSY - A SINGLE-CENTRE OBSERVATIONAL COHORT STUDY

Darja Kremel, Teresa Fernandez. *Breast Unit, Western General Hospital, Edinburgh, United Kingdom*

Introduction: A decade ago, gold standard treatment for patients with a positive sentinel lymph node biopsy (SLNB) was completion axillary node clearance (cANC). Recently, this practice has been challenged, with several studies showing comparable outcomes following axillary radiotherapy or systemic treatment for limited nodal disease. Results of trials such as POSNOC are awaited. Our aim was to study outcomes of SLNB-positive patients treated with or without cANC or in our unit.
Methods: This is an observational cohort study of all SLNB-positive patients treated for invasive breast cancer at a single centre between 2010-2012. Data were collected retrospectively from patient records. Primary outcomes were axillary recurrence (AR), overall survival (OS) and disease-free survival (DFS).
Results: Of 289 patients, n=129 patients proceeded to ANC (cANC group). N=160 did not undergo ANC (noANC group), of whom 91.2% had radiotherapy to the axilla. Median follow up was 76 months (IQR=69-87). AR was 1.6% in the cANC group and 1.9% in the noANC group (p=0.83). Kaplan-Meier analysis demonstrated that OS did not differ significantly between groups (cANC: 81.4%, noANC: 86.2%, p=0.26) and neither did DFS (cANC: 85.3%, noANC: 93.8%, p=0.12). There was no significant difference in the proportion of Grade 2 or 3 cancers and ER-/Her2+ tumours.
Conclusion: In our cohort, outcome following axillary irradiation was non-inferior to cANC in terms of AR, OS and DFS at 6 years. While the groups were not matched in terms of prognostic factors, this study provides encouraging real-life data to support further research into more conservative axillary treatment.

P006. DOES THE TOTAL TUMOUR LOAD (TTL) AS DETECTED BY ONE STEP NUCLEIC ACID AMPLIFICATION (OSNA) PREDICT NON SENTINEL NODE POSITIVITY?

Onniele Kalake[1], Catrin Powell[1], Ilyas Khattak[1], Walid Abou-Samra[1], Mandana Pennick[1,2]. [1] *Ysbyty Glan Clwyd, Bodelwyddan, United Kingdom;* [2] *Wrexham Glyndwr University, Wrexham, United Kingdom*

Introduction: It has been suggested that TTL can be used to predict non-sentinel node positivity in breast cancer by dividing patients into low ($TTL<2.5x10^4$) and high risk categories ($TTL>2.5x10^4$). This is of increasing relevance as there is a move to more conservative axillary treatment in the post ACOSOG Z0011 era. Our objective was to test this theory for validity.
Methods: A retrospective review of all OSNA cases performed in Glan Clwyd Hospital since 2015. Data collection included patient and tumour demographics, sentinel node results, total tumour load, non sentinel node involvement.
Results: Eighty four OSNA procedures carried out on 80 patients, mean age 62 years. Tumour type 53(63%) IDC, 9(12%) ILC, 6(7%) Tubular, 3(4%) DCIS, 10(13%) others. Tumour grade 1 8(9%), grade 2 37(44%), grade 3 36(43%), in-situ 3(4%). Mean invasive size 25.7mm. Er positive 60(71%), negative 22(26%), unknown 3(4%); Pr positive 51(60%), negative 31(36%), unknown 3(4%); Her2 enriched 8(9%). Mean number sentinel nodes harvested 1.6 (range1-4); 20 patients had micrometastases, 21 patients had macrometastases, 19 patients had ANC. At ANC mean nodes excised 9.1(range5-14). TTL mean score 635076(range 260-5994620; median 10900).
Non-sentinel node involvement in 47% of ANC cohort. Non-sentinel node involvement was seen in two thirds (66.6%) of high risk patients ($TTL>2.5x10^4$) as opposed to only 30% of those deemed low risk ($p<0.000001$).
Conclusions: TTL identified a high risk population in our cohort. We propose a multicentre study to confirm the findings.

P007. RADIOLOGICAL VERSUS PATHOLOGICAL RESPONSE OF THE AXILLA TO NEOADJUVANT CHEMOTHERAPY: ASSESSING THE ACCURACY OF MRI RESPONSE PREDICTION

Ross McLean[1], Andrew Pieri[1], Mark Verrill[2], Nicola Cresti[2], Henry Cain[1]. [1] *Royal Victoria Infirmary, Newcastle-Upon-Tyne, United Kingdom;* [2] *Northern Centre for Cancer Care, Newcastle-Upon-Tyne, United Kingdom*

Introduction: Neoadjuvant chemotherapy (NAC) can be used to downstage breast cancer and axillary disease to facilitate more conservative surgery. It is important to determine an imaging modality that can accurately determine which patients are appropriate for conservative treatment. This study aims to measure the accuracy of MRI in assessing the radiological response of axillary disease to NAC.
Methods: Retrospective data collection from a single institution, including all patients who underwent axillary node clearance (ANC) following NAC between May 2014-November 2017.
Results: 45 patients were included. Radiological complete response (rCR) was seen in 15 patients (33%). Four of these patients (27%) had 1-2 macrometastatic nodes on pathology, and three of these patients had $\geq$3 macrometastases (20%). 17 patients (38%) had pCR on ANC. Eight patients