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and complications associated with removal, number of SNs removed and whether the MLN was an SN was registered. Histopathological status of the MLN and SN and whether ALND was performed was registered as well. Data was analyzed with R statistical software. Primary outcome was identification rate of MLN at surgery and secondary outcome was feasibility of the procedure and rate of axillary pCR.

Results: In total, 187 patients were identified. After exclusion, 142 patients were eligible for analysis. In one patient, it was uncertain whether the MLN was found because only fibrotic tissue remained at the iodine seed site. This resulted in an IR of 99.3%. Minor challenges in marking and removal of the MLN were noted in only three patients. In 66.2% of the patients, the MLN was also a sentinel node. Overall, 43.0% had axillary pCR.

Conclusion: TAD with 125I seed marking before NACT is an easy and feasible procedure without re-marking at surgery, resulting in a high IR with few difficulties at surgery, and might outperform other marking methods. Staging with TAD can spare nearly half of breast cancer patients an axillary dissection after NACT.

No conflict of interest.

45 (PB-045) Poster
MINIVAB trial: Minimally invasive breast cancer excision using vacuum assisted biopsy under ultrasound guidance
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Background: In this abstract we present the design of the MINIVAB trial, which aims to assess whether it is feasible to remove small breast cancers completely using vacuum assisted biopsy (VAB) under ultrasound (US) guidance.

Material and Methods: Women with non-lobular invasive carcinomas ≤15 mm in diameter based upon US and MRI measurements, and without mammographic or MRI evidence of more extensive disease (e.g. microcalcifications, extensive architectural distortion, or non-mass enhancement) will be included in the study. The tumor will be removed under local anesthesia using the VAB system (also called a vacuum assisted excision, VAE). With US guidance, through a small skin incision (<0.5 cm). A localization marker will be placed in the biopsy cavity, to help determine the cavity location. After 3 weeks, breast conserving surgery is performed, excising the VAE cavity and a ≥1 cm of surrounding tissue, as deemed appropriate by the attending breast surgeon. A sentinel node biopsy will be performed in the same surgical procedure.

Results: MINIVAB is a European multi-center, translational clinical phase II study. Centers within the Netherlands, Spain and Sweden are planned to participate. In total 170 women will be included. The main endpoint of this study is the incidence of successful complete or focally involved tumor excision by VAE based on the surgical specimen. Secondary endpoints are patient, tumor, and histopathological related predictive factors for complete resection, sentinel node status, quality of life, complications and pain experience score.

Conclusion: Our study tests the feasibility of an innovating approach to remove small breast cancer, with a thorough evaluation of adverse events or possible complications. Study outcomes may pave the way to minimally invasive treatment in an outpatient setting for a selection of women with small invasive breast cancers.

No conflict of interest.

46 (PB-046) Poster
Impact of axillary disease extent on baseline 18F-FDG PET/CT in clinically node-negative breast cancer patients on the accuracy of axillary surgical staging after NCT
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Background: Clinically node-negative (cN-) breast cancer patients increasingly undergo axillary surgical staging after neoadjuvant chemo(targeted) therapy (NCT). The RISAS-procedure combines the sentinel lymph node biopsy (SLNB) with the excision of axillary lymph nodes pre-NCT marked with a radioactive iodine seed (MARI) after NCT. The impact of axillary disease extent on 18F-FDG PET/CT prior to NCT on the false negative rate (FNR) and negative predictive value (NPV) of the RISAS-procedure is investigated.

Methods: After NCT, pathologically confirmed cN+ patients underwent axillary surgical staging with the RISAS-procedure (i.e. combined SLNB and MARI) followed by a completion axillary lymph node dissection. The FNR and NPV of the SLNB, MARI-procedure and RISAS-procedure were compared between patients with limited and advanced axillary disease (1–3 vs ≥4 suspicious axillary lymph nodes) on baseline 18F-FDG PET/CT prior to NCT.

Results: Axillary pathologic complete response occurred in 55/185 patients. Prior to NCT, 116 patients had limited and 69 advanced baseline axillary disease. The FNR of the RISAS-procedure (1.3% vs 7.8%, P = 0.077), MARI-procedure (6.8% vs 9.8%, P = 0.739), and SLNB (16.4% vs 27.0%, P = 0.213) is lower, and the NPV of the RISAS-procedure (97.4% vs 81.8%, P = 0.056), MARI-procedure (87.5% vs 73.3%, P = 0.307), and SLNB (73.3% vs 63.0%, P = 0.431) higher, in limited baseline axillary disease compared to advanced baseline axillary disease.

Conclusion: Stratification of baseline axillary disease extent on 18F-FDG PET/CT insignificantly influences the accuracy of the RISAS-procedure in cN+ patients after NCT.

No conflict of interest.

47 (PB-047) Poster
Analysis of factors with impact on duration of hospitalisation for patients operated for breast cancer during COVID 19 pandemic
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Background: Short-stay hospitalization of the patient in units for breast cancer surgery is recognized as a measure of quality of organization and work, certainly without compromising the quality of treatment. The aim of this paper is to point out the factors that influenced the duration of hospitalization during the Covid 19 pandemic and to show the results in the surgical treatment of breast cancer during the Covid 19 pandemic achieved in an general hospital.

Materials and Methods: We analyzed duration of hospitalization in days for 102 patients operated due to breast cancer in the General hospital Studenica Kraljevo, from 15.03.2020 to 20.06.2021. For that purpose it was determined the extent of the surgery on the breast-conserving or mastectomy, the extent of surgery on the axilla-SLNB or ALND, distance of the patient’s place of residence (urban or rural area, distant places more than 50 km), age, comorbidity, previous neoadjuvant approach. The source of data were medical history cases and discharge lists.

Results: Among 102 operated patients69% had mastectomy,31% had sparing surgery, negative SLN had 38%, ALND had 53%,43% were from rural areas,7% were younger than 40,6% were 41–80 years old. Significant comorbidities had 9% and after neoadjuvant Th were 11%. Reoperation was done in 7%. One day of hospital stay, discharge on the same day after surgery, had 16%,75% of them had sparing surgery,25% mastectomy 50% SLNB with negative findings and 25% had ALND. The place of residence was very distant for 31% of these patients,20% of them had a pronounced comorbidity. There were 25% under 40 years and 20% those older than 80 years. Neoadjuvant therapy was previously performed in 20%. Two days of hospital stay, discharge the day after the operation, had 65%,while 30% of them had sparing surgery, mastectomy 70%,SLN with negative findings had 36%, ALND had 61%, distant with place of residence were 52%,younger than 40 years were 5% and 3% were older than 80. Comorbidity existed in 9% and neoadjuvant therapy was administered in 12%. Data were analyzed and a statistically significant difference was found that short hospitalizations of only 1 day were more common in smaller operations, less distance from the place of residence, the youngest and oldest patients. There were no complications related to the condition of the operative wound that would be the reason for repeated hospitalization, but in 7 patients (7%) reoperation occurred after a delayed PH finding that indicated positive margins or metastases in SLN.

Conclusions: Well-organized breast cancer units under extraordinary situations such as the covid 19 pandemic maintain a high level of quality as measured by length of hospitalization, with impact of the decisive factors
Background: Some studies have suggested that the patients included in the Z0011 trial may have represented only patients with ultrasound-negative axillary nodes and upfront surgery. Nevertheless, the NCCN guidelines recommend sentinel node mapping if 1 or 2 suspicious lymph nodes are identified on axillary ultrasound. The aim of this preliminary phase of the MUTAS trial was therefore to establish the accuracy of sentinel node mapping in patients with axillary involvement undergoing upfront surgery.

Material and methods: We recruited patients with proven metastatic axillary nodes and upfront surgery. We performed sentinel node mapping in these patients before the surgical intervention. During the intervention, the biopsy-proven metastatic node, sentinel nodes and the remaining axillary nodes were excised and identified separately. Sentinel node status was considered representative of the status of the remaining axillary nodes. We calculated the sensitivity, specificity, negative predictive value and positive predictive value of the sentinel node, overall and in patients with palpable nodes, in those with non-palpable nodes and an ultrasound diagnosis of axillary involvement, in those with 1 or 2 suspicious nodes on axillary ultrasound, and in patients with a single suspicious node on axillary ultrasound.

Results: We included 25 patients in this preliminary phase. The false-negative rate of sentinel node mapping was 28% overall, 21.42% for patients with palpable nodes, 36.36% for patients with non-palpable nodes and an ultrasound diagnosis of axillary involvement, 28.75% for those with 1 or 2 suspicious nodes on axillary ultrasound, and 15.38% in patients with a single suspicious node on axillary ultrasound. Negative predictive value was highest in patients with a single suspicious node on axillary ultrasound (75%).

Conclusion: In this study, sentinel node mapping was not reliable in patients with biopsy-proven metastatic axillary nodes and upstream surgery, either overall or for any of the subgroups studied, as the false negative rate was above 10%. Consequently, it is doubtful that the sentinel node adds any valid information in patients with 1 or 2 suspicious axillary lymph nodes on ultrasound, even if lymph nodes are non-palpable. NCCN recommendations regarding these patients seem inadequate from our point of view.

This study was funded by the 6th Ana Balil Grant of the GEICAM (Spanish acronym for the Grupo Español de Investigación en Cáncer de Mama [Spanish Breast Cancer Group]).

No conflict of interest.