breast conservation using large resection volumes (OBCII; Clough level II/Tübingen 5–6) may improve local recurrence rates in biologically high risk breast cancer patients compared with conventional breast conservation (CBC; Tübingen 1–2) and low volume (OBCI; Clough level I/Tübingen 3–4).

**Methods:** Seventeen breast cancer centers from the Oncoplastic Breast Consortium (OPBC) network retrospectively included data from 3177 women consecutively undergoing breast conservation for high risk breast cancer between 1st January 2010 and 31st December 2013.

**Results:** Thirty percent were treated with OBC (OBCI n = 663; OBCII n = 297). The CBC/OBCI group had significantly more small tumors and more close resection margins compared with OBCII (pT1: 50% versus 37% p = 0.002; margin <1/X: 17% versus 6% p < 0.001). There were significant more second re-resections due to R1 (tumor on ink) after the first surgical attempt in the CBC/OBCI compared with OBCII (11% versus 7%; p = 0.049). More her2pos subtypes were seen in the OBCI group (41% versus 26% p < 0.001). Univariate as well as multivariable regression analysis adjusted for tumor biology, tumor size and systemic treatment as well as radiotherapy demonstrated no clinical relevant difference in local, regional or distant recurrence free or overall survival between CBC/OBCI and OBCII.

**Conclusion(s):** Large resection volumes in oncoplastic surgery increases the distance from cancer cells to the margin of the specimen as well as reduces re-operation rates, however there is no oncologic influence on local, regional or distant recurrence free nor on overall survival using level II oncoplastic surgery in high risk breast cancer.

**Conflict of Interest:** No significant relationships.

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**P135**

**Management of patients with residual microcalcifications and false-negative results after stereotactic vacuum – assisted biopsy of mammographic suspicious microcalcifications**

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**Goals:** The aim of the present study is to determine the false negative rate of stereotactically vacuum-assisted breast biopsy (VABB) in patients with suspicious microcalcifications detected on screening mammography.

**Methods:** In our Department, from January 2015 to April 2020, 1280 patients underwent VABB. Data of patients with benign lesions in VABB were evaluated retrospectively during a median follow-up period of 16 months. In total, 242 VABBs were considered benign and follow-up was recommended. Of these 242 lesions, 118 were completely removed during the biopsy procedure.

**Results:** Follow-up data were available for 208 of 242 patients (86%) with intervals ranging from 6 to 54 months (median 16). Surgery or reintervention was needed in 7 of 208 patients (3.4%). Of these cases 3/208 (1.4%) turned out as false negatives. Two of these cases showed large areas of microcalcifications or several clusters, and only partial removal was possible due to the size of the lesions.

**Conclusion(s):** Although VABB has proven clinical value and is an accurate procedure for diagnosing nonpalpable breast lesions with a low cancer miss rate, we should consider the exclusion of malignancy in cases of extensive microcalcifications or several clusters as a limitation. The radiologic-histologic correlation in these cases is a challenge, especially in terms of residual microcalcifications. To avoid delayed cancer diagnosis, strict follow-up of benign lesions is necessary.

**Conflict of Interest:** No significant relationships.

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**P136**

**Ductal carcinoma in situ (DCIS) and breast cancer-specific and all-cause mortality among postmenopausal women in the Women’s Health Initiative**


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**Goals:** A small proportion of women with DCIS die of breast cancer. The purpose of this analysis is to compare breast-cancer specific and all-cause mortality among women with DCIS to that of unaffected controls among participants in the Women’s Health Initiative (WHI).

**Methods:** The study population included 68,133 postmenopausal women aged 50 to 79 years who enrolled in a WHI clinical trial (Dietary Modification –DM, Hormone Therapy - HT or Calcium Vitamin D) from 1993–1998 at one of 40 US clinical centers. After study enrollment, there were 781 incident cases of DCIS identified who were matched to 781 controls by age at study entry and time since enrollment. Information collected at study entry included medical and family cancer history, demographics, lifestyle, as well as cancer and cardiovascular disease risk factors. Screening mammography was mandated annually or bi-annually with high adherence. [MJE1] Incident DCIS cases were confirmed by central medical record review. Mortality data available through 2018, were enhanced by serial National Death Index queries. Adjusted Cox proportional hazard regression models were used to estimate hazard ratios (HRs) and 95% confidence intervals (CI) for breast cancer-[MJE2] specific and all-cause mortality for women with DCIS and controls. Kaplan Meier plots were used to assess 10-year mortality rates.

**Results:** Median follow-up was 20.3 years from enrolment and 13.2 years from DCIS diagnosis (or corresponding date of mammogram for matched controls). Compared to women without incident DCIS, women with incident DCIS had higher income, were more likely to have a family history of breast cancer, were less likely to be WHI HT trial participants but were more likely to be current HT users (all P < 0.01). There were 227 (29%) deaths among women with DCIS and 253 (32%) deaths among women without DCIS. In multi-variable adjusted analyses, compared to women without DCIS, breast cancer-specific mortality was statistically significantly higher for women with incident DCIS (HR: 2.95; 95% CI: 1.21–7.20). However, the absolute difference was small, with 10-year breast cancer-specific mortality 0.8% in women without DCIS and 1.5% in women with incident DCIS. There was no significant difference in all-cause mortality between the two groups (HR: 0.97; 95% CI: 0.80–1.16).

**Conclusion(s):** In postmenopausal women, a diagnosis of DCIS is [MJE1] associated with higher mortality due to breast cancer, but no relationship with all-cause mortality.

**Conflict of Interest:** Rowan Chlebowski is a consultant for Novartis, AstraZeneca, Genentech, Merck, Immunomedics, and Puma and received honorarium from Novartis and AstraZeneca. None of the other authors report any conflict of interest related to this study.

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**P137**

**Autologous breast reconstruction with free flaps in patients with oligometastatic breast cancer: when to proceed and when not?**


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**Goals:** Clinical decision making about autologous breast reconstruction (ABR) in the oligometastatic setting is challenging due to a lack of
outcome data in this group of patients and the perception that surgery may accelerate disease progression. We sought to benchmark surgical and survival outcomes in a cohort of patients with oligometastatic disease undergoing autologous breast reconstruction with a deep inferior epigastric artery perforator (DIEP) flap in our unit.

**Methods:** We performed a retrospective cohort study (2004–2019) of patients with oligometastatic disease (defined as ≤5 sites of metastases) either pre- or within 3-months post-DIEP flap surgery at The Royal Marsden Hospital. Exclusion criteria included >5 metastatic sites and patients with metastatic disease undergoing chest wall resurfacing with a DIEP flap for local palliation. We quantified surgical morbidity and oncological survival outcome in this group.

**Results:** We performed autologous breast reconstruction with a DIEP flap (19 unilateral, 1 bilateral) in 20 patients with oligometastatic disease (55% bone, single site; 25% visceral only, 20% bone and visceral). In 11 patients, reconstruction was performed at the time of mastectomy (8 primary surgery, 3 failure of breast conservation surgery) and in 9 patients in the delayed setting. Primary tumour characteristics included median size 66.4 mm (2–155 mm), 86% ductal, 71% hormone receptor positive with N1–N3 in 60%. The majority of patients had received previous systemic/regional cancer treatments.

Breast reconstructions were performed successfully in all patients with no cases of flap failure and favourable risk profile (Clavien-Dindo: 0 (30%), I-II (65%), III (5%)). The median follow-up was 38 months (3–90 months) in 19 patients. The median overall survival (OS) from breast reconstruction was 38 months (8–93 months) (OS 3-years = 89.2%). The median progression free survival (PFS) from breast reconstruction was 23 months (1–57 months) (PFS 3-years = 45%). Tumour size and inflammatory disease components were suggestive of earlier disease progression but hormone receptor status and duration of oligometastatic disease had no effect.

**Conclusion(s):** Autologous breast reconstruction in the oligometastatic disease setting can be delivered safely but may be associated with early disease progression in patients with larger tumours or tumours with an inflammatory component. We would advocate discussion of all oligometastic cases within a specialist Oncoplastic multidisciplinary team.

**Conflict of Interest:** No significant relationships.

**P138**

Evaluation of the impact of the COVID-19 pandemic on the practice of axillary node dissection

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**Goals:** The Association of Breast Surgery published “COVID-altered” guidance for the management of breast cancer during the COVID-19 pandemic, including that neoadjuvant chemotherapy was only to be used only in inoperable disease and not to downstage the axilla or facilitate breast conserving surgery. In addition, there has been concern over delayed cancer presentation with increased axillary node involvement.

This observational study aims to establish if the practice of axillary node dissection (AND) has increased in the context of the COVID-19 pandemic.

**Methods:** Patients undergoing operative management for breast cancer were identified retrospectively from theatre coding in a UK breast unit. Pre-COVID (March 2018 – February 2020) and COVID pandemic (March – September 2020) cohorts were defined and compared. For those undergoing AND the following data was ascertained: indication, tumour biology, neoadjuvant therapy, deviation from routine practice and histological outcomes.

**Results:** AND was performed in 20.2% (23/114) of all breast cancer operations during the COVID pandemic compared with 18.9% (78/411) pre-COVID. Indication for AND during COVID pandemic and pre-COVID respectively: clinically node positive 82.6%/79.4%; positive sentinel node biopsy 4.3%/17.9%; recurrence or metastases from contralateral cancer 13%/2.5%. Neoadjuvant chemotherapy preceded AND in 30% of cases in both cohorts. Case review identified one patient in whom neoadjuvant chemotherapy for a clinically node positive HER2+ was omitted due to the pandemic and one other who had adjuvant chemotherapy omitted for a HER2+ cancer with a single positive sentinel node mandating an AND which yielded no further positive nodes.

**Conclusion(s):** The COVID-19 pandemic has not had a major impact on rates of AND in our practice. However, we identified 2 patients who may have avoided AND had there not been deviation from routine neoadjuvant and adjuvant chemotherapy practice.

**Conflict of Interest:** No significant relationships.

**P139**

Surgical and oncologic outcomes of robotic and conventional nipple-sparing mastectomy with immediate reconstruction: pooled analysis of individual patient-level data from international multi-centers

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**Goals:** The aim of this study is to evaluate and compare surgical and oncologic outcomes between robotic nipple-sparing mastectomy and conventional nipple-sparing mastectomy with immediate breast reconstruction.

**Methods:** This is a pooled analysis of individual patient-level data from international multi-centers. A total of 755 procedures in 660 women who underwent nipple-sparing mastectomy with immediate reconstruction were enrolled. All cases were analyzed according to the method of the procedures: 252 procedures of robotic nipple-sparing mastectomy (RNSM) and 463 procedures of conventional nipple-sparing mastectomy (CNSM). Primary endpoint was surgical outcomes including the rates of complication within postoperative 30 days (POD 30d), nipple necrosis, and the grade of Clavien-Dindo classification. Secondary endpoints were oncologic outcomes including the rates of disease-free survival and overall survival.

**Results:** Complication rates at POD 30d rates were not different between the two groups. Nipple necrosis rates were 2.2% for RNSM and 7.8% for CNSM, respectively (p = 0.002). Postoperative complications grade III were less common in the RNSM group than the CNSM group (10.9% vs. 19.4%, p = 0.003). After PSM, nipple necrosis and rate of postoperative complications grade III were significantly lower in the RNSM group than in the CNSM group (11% vs. 8.4%, p = 0.001 for nipple necrosis rate, 11.6% vs. 22.1%, p = 0.011 for postoperative complications grade III). Disease-free and overall survival rates were not significantly different between two groups.