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Conclusions: The Magnifying Glass incision is considered beneficial in NSM and DIEP flap breast reconstruction, as it enhances cosmetic outcomes and pain management.

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P340
Multiple breast cancer: EUSOMA real world data

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Goals: to assess the clinicopathological characteristics, treatment modalities used and outcome of patients with multiple breast cancer (MBC) in a single breast (multicentric, multifocal) compared to unifocal breast cancer (UBC).

Methods: the EUSOMA central datawarehouse contains prospectively collected information that includes pseudonymized individual patient records on primary breast cancer cases diagnosed and treated in certified European Breast Centres. A retrospective analysis from the EUSOMA database was performed comparing patients with *unifocal versus multiple* breast cancer registered in 2017–2023. Uni- and multivariable Cox analyses were performed.

Results: In the period 2017–2023 respectively 81,319 patients with UBC and 21,026 with MBC were treated in 58 certified EUSOMA breast centers (14 countries). Tumor stage was higher in patients with MBC ($p < 0.001$) and they were more likely to have invaded lymph nodes (36.5% vs 24.0%, $p < 0.001$), more aggressive biological features ($p < 0.001$) and locally advanced disease ($p < 0.001$). Patients with MBC were treated by breast conservation surgery (BCS) in 35.4% of cases and had a sentinel node biopsy in 60.3% compared respectively to 75.1% and 68.1 in UBC (all $p < 0.001$). 53.7% of patients with MBC had radiotherapy compared to 73.5% of UBC patients (both $p < 0.001$). and patients treated by BCS had a significantly better OS, BSS, RFS compared to patients treated by mastectomy (all $p < 0.001$). Multivariate analysis showed that age >70 years, UBC, higher tumor stage, lymph node positivity, presence of distant metastasis, non-luminal A biotype, breast conservation surgery, no radiotherapy, no endocrine therapy no chemotherapy (all $p < 0.01$) were determinants of lower overall survival. Local recurrence rate was significantly higher in elderly patients, higher tumor stage, lymph node positivity, presence of distant metastasis, non-luminal A biotype, breast conservation surgery, no radiotherapy, no endocrine therapy, no chemotherapy (all $p < 0.01$). Cox analyses showed no difference in determinants for local recurrence rate which were assessed between UBC and MBC, neither at uni- nor multivariable analysis.

Conclusions: MBC patients have a similar outcome as patients with UBC. BCS is safe in selected patients.

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P341
Efficacy of the Magseed Localisation in Wide Local Excision for Breast Cancer: A Single-Institution Study

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Goals: The main goal of this study is to evaluate the efficacy of the Magseed in wide local excisions (WLEs) for breast cancer by assessing positive margin rates, re-excision rates, and factors influencing surgical outcomes. Additionally, the study explored the effect of specimen-to-tumor size ratios on the incidence of margin positivity.

Methods: A retrospective analysis was conducted on 100 lesions from 99 patients who underwent WLE using the Magseed system at Hospital A between January 2023 and June 2024. Patients with incomplete records, alternative localization techniques, or near-complete tumour responses were excluded. Data, including demographics, tumour characteristics, surgical details, and histopathological reports, were manually extracted from electronic medical records. Positive margins were defined as tumour cells at the inked margin or within 1 mm for ductal carcinoma in situ (DCIS), invasive ductal carcinoma (IDC) and all other forms of cancer. The primary outcome was the positive margin rate, while secondary outcomes included re-excision rates and resolution methods for positive margins. The relationship between specimen-to-tumour size ratios and margin positivity was also analyzed.

Results: The mean age of the cohort was 63.0 years (SD = 11.1), with all patients being female. The lesions included 49 cases of IDC + DCIS, 14 DCIS, 25 IDC, and 12 other cancer types. The localization success rate was 100%. The overall positive margin rate was 10%, with a corresponding re-excision rate of 10%. Among the 10 positive margin cases, all underwent re-excision of margins to achieve tumour free margins. The average tumour size was 18 mm, and the average specimen volume was 70,844 mm³. Positive margins were inversely correlated with specimen-to-tumour size ratios, with 70% of positive margins occurring when the ratio was ≤ 1.60 . Ratios exceeding 1.60 were associated with no significant margin positivity, except for one outlier.

Table 1.
Demographics Summary.

Category	Details
Total Patients	99
Average Age (years) (SD = 11.0)	63.0
%Female	100
Patients with 1 Lesion	98
Patients with 2 Lesions	1
Total Lesions	100
Specimen with Positive Margins	10
Specimen with 1 Positive Margin	4
Specimen with 2 Positive Margins	3
Specimen with 3 Positive Margins	2
Specimen with 4 Positive Margins	1
Total number of Positive Margins	20

Table 2.
Surgical Outcomes.

	All Lesions (n = 100)	IDC +DCIS (n = 49)	DCIS (n = 14)	IDC (n = 25)	Others (n = 12)
Localisation Rate (%)	100	100	100	100	100
Positive Margin Rate (n, (%))	10,10	7, 14.3	3, 21.4	0, 0	0, 0
Total Number of Positive Margins	20	16	4	0	0
Re-excision Rate (%)	10	14.3	21.4	0	0
Average Tumour Size on Radiology (mm)	15.9	15.7	15.3	14.5	20.4
Average Tumour Size on Specimen (mm)	18	19.4	17.3	14.8	19.3
Average Specimen Volume (mm ³)	70844	67574	72600	81331	60303

Conclusions: The Magseed system demonstrated high localization accuracy and low positive margin rates in WLE for breast cancer. The findings highlight the importance of optimal specimen-to-tumor size ratios to reduce margin positivity. This study supports the utility of Magseed in improving surgical precision and patient outcomes.

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Surgical management of positive margins after breast conservative surgery: 5-years monoinstitutional records with 5-years follow-up

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Goals: The definition of adequate margins after breast conservative surgery at our Institution has been set for the last time after 14th St. Gallen International Breast Cancer Conference in 2015 as “no ink on tumour” for invasive breast cancer and 2 mm for in situ. A second surgical intervention can be therefore indicated for inadequate margins and 2 options are available: repeat conservative surgery or completion mastectomy.

Methods: We retrospectively collected from our Database from January 2015 to December 2019 patients who underwent a second surgery according to the above cited criteria, reporting the evidence of residual disease on the second histology, the persistence of inadequate margins, recurrences and survival.

Macroscopical margins examination is routinely carried out during the first surgical intervention to allow intraoperative margins re-excision, while when microcalcifications or a marker are present, intraoperative specimen radiography is performed with the same purpose.

Results: 3,2% (190/5865) of patients underwent a second surgery after a conservative surgical intervention for primary breast cancer, which was a mastectomy for 75% (142/190) of patients (72% invasive and 28% in situ) and a new conservative surgery for 25% (48/190) of patients (77% invasive and 23% in situ). 30% (43/142) of mastectomy specimens were free from tumor while 17% (8/48) of patients (5 invasive and 3 in situ) after a second conservative approach required a mastectomy for persistent tumor-involved margins. 5 in-breast relapses were recorded after a medium follow-up of 5 years, respectively 2% (3/142) after mastectomy (2 invasive, 1 in situ) and 4% (2/48) after repeat conservative surgery (1 in situ, 1 invasive). 2 deaths were recorded, both after completion mastectomy for invasive breast cancer, while disease-free survival resulted 91%.

Conclusions: Re-intervention rate resulted in line with the European Society of Breast Cancer Specialists (EUSOMA) quality indicator (<10%). A balance is required between unnecessary mastectomies and the risk to perform a third surgery delaying adjuvant treatments. Some predictive models of limited use considering factors like tumor size, presence of microcalcifications, lobular carcinoma are available from literature, however new data considering the employment of MRI and contrast-enhancement mammogram, new devices for intraoperative margins assessment, the improvements in treatments and the increased use of neoadjuvant therapies will provide an evolution of the topic.

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Proportion and surgical management of low- vs. higher-risk breast ductal carcinoma in situ in two oncology centers in Lima, Peru (2016–2023)

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Goals: This study examines the proportion of low-risk ductal carcinoma in situ (DCIS) cases using the COMET study criteria and compares surgical treatments for low-risk versus higher-risk DCIS among all breast DCIS cases treated at two oncology centers in Lima, Peru.

Methods: Data were collected from medical records, pathology reports, and imaging studies of all breast DCIS cases diagnosed at ALIADA Centro Oncológico and Clínica Internacional from 2016 to 2023 in Lima, Peru. Clinical and histopathological criteria for low-risk DCIS was based on the COMET study as follows: female patients aged 40 years or older at diagnosis, no prior history of breast cancer (DCIS or invasive cancer), unilateral or bilateral DCIS (unifocal or multifocal), ECOG performance status of 0–1, nuclear grade I or II DCIS without necrosis, and hormone receptor positivity confirmed by IHC ($\geq 10\%$ staining or Allred score ≥ 4). Patients not meeting these criteria were classified into the higher risk DCIS group.

Results: From 228 identified DCIS cases, 23 patients with prior cancers or bilateral invasive breast cancer and 5 without hormone receptor data were excluded, leaving a final sample of 200 women with a mean age of 50.8 years (SD: 10.7). Of the 200 patients, 91.5% were aged 40 or older. Microcalcifications and non-mass lesions were found in 83.5%. The most common histological subtypes were comedo (34.93%), papillary (34.40%), and micropapillary (13.3%). Among biopsies, 66.5% showed multiple histological subtypes, with central necrosis in 47%. Nuclear grade I–II was found in 77% of cases and 87.5% had positive hormone receptors.

Low-risk DCIS was identified in 72 patients (36%), from which 16 patients (22.2%) underwent radical surgical treatment and 56 patients (77.8%) underwent breast-conserving surgery. In contrast, in the higher-risk DCIS group, 43 patients (33.6%) received radical surgery, and 85 patients (66.4%) received breast-conserving surgery, with no significant difference between the groups ($p = 0.062$).

Conclusions: These findings suggest that a significant proportion of DCIS cases in this population may be suitable for a more conservative approach in the future, depending on the clinical outcomes of ongoing studies. There was no difference in the type of surgery between low-risk and higher-risk DCIS, and the rate was consistent with other studies published worldwide.

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