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observed between the two groups regarding length of hospital stay, complication rates, or oncologic outcomes.

Conclusions: Endoscopic mastectomy is a time-efficient and cost-effective alternative to robotic mastectomy. Both approaches demonstrated comparable oncologic outcomes and safety profiles, suggesting that endoscopic mastectomy could be a viable option for breast cancer surgery.

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Two-stage mastectomy approach for patients with significant breast ptosis: reducing complications and improving aesthetic outcomes

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Goals: Patients with significant breast ptosis undergoing nipple-areola complex sparing mastectomy (NSM) with immediate implant reconstruction and skin reduction face unique challenges, including a higher risk of skin flap and nipple-areola complex (NAC) necrosis and suboptimal aesthetic outcomes. A two-stage surgical approach may address these challenges by enhancing reconstruction results. However, direct comparisons of outcomes between staged and non-staged techniques remain limited. This study aims to compare necrosis complication rates of NSM with immediate implant reconstruction and skin reduction versus two-stage NSM with immediate implant reconstruction following reduction mammoplasty.

Methods: A cohort of 65 patients with significant breast ptosis (Grade II–III by Regnault's classification) operated on by one surgical team between 2020 and 2023 was analysed. The patients were divided into two groups:

1. NSM with one staged implant reconstruction and inverted-T pattern reduction: N = 36, mean age: 47.08 years, range [38–62 years], mean body mass index (BMI) 25.2 kg/m².
2. Two-stage NSM mastectomy (Stage 1: Reduction mammoplasty. Stage 2: NSM mastectomy and reconstruction): N = 29, mean age: 42.5 years, range [32–57 years], BMI 24.1 kg/m².

Reconstruction was performed using breast implants, with reductions carried out six months prior to mastectomy. NAC and skin flap necrosis rates, as well as reconstructive outcomes, were compared between the staged and non-staged groups. Statistical analysis was performed using Fisher's Exact Test, with a p-value of <0.05 considered statistically significant.

Results: The complication rate was significantly lower in the two-stage NSM group (6.9%) compared to the NSM group with immediate implant reconstruction and inverted-T pattern reduction (38.9%) (p = 0.003). In the two-stage group, only two cases of partial NAC necrosis were observed, with no other reconstructive complications reported.

Multivariate analysis demonstrated significantly higher post-operative satisfaction in the two-stage NSM group, as measured by the BREAST-Q survey (p = 0.001).

Conclusions: The two-stage NSM is a safer approach for patients with breast ptosis, significantly reducing complication rates and improving aesthetic outcomes. This two-stage technique not only improves surgical outcomes, but also enhances patient satisfaction, providing a more reliable solution for patients with large, ptotic breasts undergoing mastectomy and reconstruction.

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Evaluating the Impact of the SAVI Scout Device on Positive Margin Rates in Breast-Conserving Surgery: A Systematic Review

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Goals: The goal of this systematic review is to evaluate the effectiveness of the SAVI Scout device in breast-conserving surgery by analyzing positive margin rates reported in the literature. This review aims to provide a comprehensive synthesis of studies to determine the device's impact on surgical outcomes, including its ability to reduce re-excision rates.

Methods: This systematic review followed PRISMA guidelines. A comprehensive search was conducted in PubMed, Ovid, and the Cochrane Library to identify studies reporting positive margin rates for wide local excisions (WLEs) using the SAVI Scout device. Keywords included "SAVI Scout," "positive margin rate," "wide local excision," "breast-conserving surgery," and "breast cancer." Studies in English providing data on positive margins were included, while single case reports, abstracts, and unrelated studies were excluded. From 142 studies, 47 duplicates were removed, 30 underwent full-text review, and 19 were included. Data extracted included study design, sample size, demographics, positive margin criteria, margin definitions, and re-excision rates. Positive margins were defined as the combined sum of close and positive margins due to variability in definitions. Titles and abstracts were screened independently by two reviewers, with conflicts resolved by consensus. Findings were summarized descriptively due to heterogeneity.

Results: The positive margin rate in the literature ranged from 0.00% to 29.70%, with a weighted average of 13.46%. The sample size ranged from 7 (Chapgar et al.) to 320 (Tingen et al.). Mango et al. (2016) reported the lowest rate (0.00%), while Cox et al. (2016b) reported the highest (29.70%). Variation in positive margin rates reflects differences in criteria and surgical approaches across studies. UK studies (e.g., Wazir et al., Tayeh et al.) defined positive margins as ≤1 mm for invasive ductal carcinoma (IDC) and ≤2 mm for ductal carcinoma in situ (DCIS). US studies showed greater variability, with criteria ranging from tumor on ink (Mango et al., Misbach et al.) to <2 mm for DCIS (Choe et al., Chapgar et al.). In China and Australia, stricter thresholds (>2 mm for clear margins) were employed. Stricter criteria increased positive margin rates.

First Author	Sample Size	Positive Margin Rate
Bercovici et al.	202	8.42
Chapgar et al.	7	28.57
Choe et al.	254	18.90
Cox et al. (2016a)	41	29.27
Cox et al. (2016b)	101	29.70
Easwaralingam et al	130	10.77
Farha et al.	44	2.27
Kuzmiak et al.	66	21.21
Lee et al.	21	9.52
Mango et al. (2016)	13	0.00
Mango et al. (2017)	54	25.93
Misbach et al.	41	21.95
Nguyen et al.	110	11.82
Patel et al.	42	16.67
Srouf et al.	104	15.38
Tayeh et al.	17	5.88
Tingen et al.	320	5.63
Wazir et al.	57	7.02
Woo et al.	23	4.35

Conclusions: This review highlights the SAVI Scout device's effectiveness in breast-conserving surgery, showing low positive margin

rates and successful localization. It supports its role in improving surgical precision and outcomes.

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Oncological Safety and Patient Satisfaction of Immediate Lipofilling in Breast-Conserving Surgery: A Systematic Review and Subgroup Meta-Analysis Comparing Outcomes with No Lipofilling

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Goals: We aimed to systematically evaluate the oncological safety and aesthetic outcomes of immediate lipofilling following wide local excision in breast-conserving surgery and comparing with no lipofilling.

Methods: A systematic search was performed across PubMed, MEDLINE, Embase, and Cochrane databases up to November 2024. The search strategy incorporated keywords including “Immediate Lipofilling,” “Immediate Lipomodelling,” “Immediate Autologous Fat Grafting,” “Immediate Autologous Fat Transfer,” “Wide Local Excision,” and “Breast Conserving Surgery.” A total of 49 studies were independently screened by two reviewers, resulting in the inclusion of 10 studies in the final analysis. The quality of the included studies was evaluated using the Newcastle-Ottawa Scale. Key outcomes assessed included cancer recurrence, recurrence site, patient satisfaction, complications, and surgical techniques. A subgroup meta-analysis was conducted to compare oncological outcomes between immediate lipofilling and no lipofilling groups. Additionally, patient satisfaction outcomes were analyzed between the two cohorts.

Results: A total of 10 studies involving 819 patients were analyzed, comparing immediate lipofilling (treatment group) with no lipofilling (control group) after breast-conserving surgery. Meta-analysis showed no significant difference in cancer recurrence rates between groups (RR: 0.97, 95% CI: 0.38–2.43), with recurrence rates ranging from 0–7.5% in the treatment group and 0–10% in controls. Funnel plot analysis showed no evidence of publication bias. Local recurrences were primarily observed in breast tissue and lymph nodes, with distant metastases being rare. Studies without control groups reported recurrence rates of 0–9.2%. Follow-up durations varied from 9.5 to 67.43 months, providing comprehensive long-term insights. Patient satisfaction, evaluated using tools such as Breast-Q and custom surveys, was consistently higher in the lipofilling group. Scores for aesthetic and functional outcomes showed significant improvement, with markedly greater satisfaction reported in the treatment group. Most studies utilized a combination of injection techniques, primarily focusing on peri-tumoral and subcutaneous fat placement.

Conclusions: Immediate lipofilling after breast-conserving surgery is oncologically safe, with local recurrence rates similar to standard procedures. It delivers superior aesthetic outcomes and high patient satisfaction.

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Advancements in pre-pectoral breast reconstruction: exploring direct-to-implant “coverless” technique

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Goals: Advancements in treatment and surgical techniques have expanded the criteria for conservative mastectomies with implant-based reconstructions, considered oncologically safe. Several studies demonstrate the safety of direct-to-implant (DTI) reconstruction using polyurethane (PU)-coated implants or implants with Acellular Dermal Matrix (ADM). DTI is associated with a reduction in animation deformity, shoulder dysfunction, and post-operative pain. Application of DTI techniques increased during the COVID 19 era to optimize resources and reduce hospital time and outpatients’ follow-ups.

In this scenario, we developed a valid alternative to PU- and ADM-coated DTI reconstruction by introducing “coverless” breast implants. The aim of this present study was to report our experience in DTI reconstruction with a “coverless” technique.

The primary outcome was to retrospectively evaluate minor and major complication rates. Secondary outcomes were complications management, correlation with risk factors (radiotherapy, neoadjuvant and adjuvant therapies, clinical assessment) and postoperative quality of life.

Methods: We conducted a single-center retrospective study of 97 patients (126 breasts) operated from July 2021 to January 2024. We collected patient data, comorbidities, smoking history, radiotherapy, neoadjuvant or adjuvant therapy, lymphadenectomy, surgical data, complications rate and management, and quality of life. Every surgery was performed by an oncoplastic team following a standardized procedure.

Complications were categorized as early and late and we divided them in minor and major according to Clavien Dindo classification. Patients’ satisfaction rate and quality of life was assessed through the Breast-Q questionnaire.

Results: Minor complications rate was low (6–10%) and benefited from non-operative management. Major complications arise in a total of 7 cases (5.5%), two by previously irradiated breasts, two during adjuvant chemotherapy and one by a BMI of 19 and active smoking. Postoperative Q-scores showed a good quality of life impact.

Conclusions: Prepectoral coverless DTI reconstruction is a standardized, reproducible technique, with limited costs. Major complications rates are low and restricted to high-risk patients (previously irradiated breasts, adjuvant treatments). Postoperative quality of life is good with minimal discomfort. Future studies enrolling large populations could be useful to evaluate long-term complications and refine risk assessment and patient selection.

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Cavity shave technique versus intraoperative evaluation for safe resection margins in oncoplastic breast surgery: a randomized clinical trial

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Goals: In the modern era, oncoplastic breast surgery aims to conserving breast tissue ensuring both oncological and esthetic outcomes, however among the major challenges there is the risk of positive margins which then require a second surgery. During the years various strategies have been adopted to minimize those risks