remain largely lacking. This study’s aim is to compare one-year complications and PROs for DTI versus expander/implant (TE) procedures in immediate breast reconstruction.

**METHODS:** Patients undergoing immediate DTI or TE reconstruction were enrolled in the 11-center Mastectomy Reconstruction Outcomes Consortium (MROC) Study. In addition to demographic and clinical data, complications (defined as “major” and “all” complications), and PROs (using the BREAST-Q) were evaluated postoperatively at one year. Mixed-effects regression models adjusting for baseline demographic and clinical differences were used.

**RESULTS:** Of 1627 eligible patients, there were 106 DTI and 1521 TE procedures. For indications, DTI was more commonly performed for prophylactic (p<0.0001) and nipple sparing (p<0.0001) mastectomies compared to TE procedures. Radiation therapy (p=0.01), adjuvant chemotherapy (p<0.0001), and axillary dissection (p<0.0001) were more common in the TE cohort. Compared to TE patients exchanged within ten months of the initial procedure, DTI reconstruction was associated with significantly higher risk of major complications (21.7% versus 11.6% unadjusted, adjusted OR =1.9, p=0.03). For all complications, DTI versus TE differences were not significantly different (27.4% versus 19.2% unadjusted, adjusted OR=1.4, p=0.17). Comparing DTI and TE patients exchanged by one year, there were no significant differences in breast satisfaction or psychosocial and sexual well-being. Among all immediate TE patients, 268 (17.6%) had not undergone exchange by the end of year one. There were significantly higher odds of any (p<0.01) and major complications (p<0.01) in this subgroup, compared with those exchanged within ten months. Patients awaiting exchange at one year also reported significantly lower satisfaction with breast (p<0.001), psychosocial well-being (p=0.02), and physical well-being (p=0.02).

**CONCLUSION:** Although DTI reconstruction was associated with a significantly higher risk for major complications, this approach produced equivalent patient satisfaction and well-being at one year postoperatively, compared with expander/implant procedures. Among TE patients, delays in exchange at one year were associated with lower PRO scores. Despite its risks, DTI reconstruction appears to provide comparable patient satisfaction and well-being, while avoiding the necessity of a second operation and the potential for delays in expander exchange.

**CONFLICT OF INTEREST:** All other authors report no conflicts of interest.

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**Targeted Two Stage Risk Reducing Mastopexy/Reduction and Straight to Implant NSM**

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**INTRODUCTION:** Nipple sparing mastectomy (NSM) with simultaneous hammock technique straight to implant reconstruction (SIR) is a good method for the reconstruction of risk reduction patients. In spite of the promising method, patients with macromastia and severely malformed breasts remain a challenging group to treat satisfactorily and more often end up having a difficult corrective procedure and unacceptably high rate of failed reconstruction. The aim of this study was to examine if pre-shaping Mastopexy/reduction followed by a delayed NSM/SIR would be a beneficial approach in these challenging cases.

**MATERIALS AND METHODS:** Patients seeking risk reducing NSM/SIR at our institutions deemed unfit for a one stage procedure based on our previous experience were offered a targeted two stage risk reducing mastopexy/reduction followed by a delayed secondary NSM and SIR. 40 reconstructions were performed in 20 patients aged 43 years (26–57). We registered comorbidities and risk factors, size and shape of ADMs and implants used, the time span from mastopexy to NSM/SIR, time to follow-up, partial or

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total nipple necrosis and infection, hematoma, skin necrosis and wound dehiscence and reconstruction outcome results.

RESULTS: Reconstruction was achieved without any failure or NAC losses in all 40/40 breasts, 20 bilateral targeted two stage risk reducing mastopexy/reduction and NSM/SIR procedures. Patients median BMI was 30(22–44). Six patients were smokers and one had hypertension. Anatomical shaped silicone implants were used in all cases, average size 555 cc, (310 to 690). Average OR time for NSM/SIR was 125 minutes (90 to 235). The median time between procedures was 133days (105–266). Two patients had a re-operation due to hematoma and fat necrosis. Five patients had minor complications. The median follow-up is currently 220 days (30 to 602).

CONCLUSION: Targeted preshaping mastopexy/reduction of the large, ptotic and deformed breast prior to NSM/SIR has proven to be a successful method to overcome the drawbacks of the procedure for this challenging group of patients. It can be planned and performed safely with a time span of three to four months between surgeries. It appears that the nipple areola complex is pre-conditioned by this two stage approach as we did not experience any vascular compromise or necrosis of the NAC, even in high risk patients.

DISCLOSURE/FINANCIAL SUPPORT: None

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The Nipple-Areola Preserving Mastectomy

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BACKGROUND: Conservative mastectomy procedures, such as the nipple-sparing mastectomy (NSM), present appealing options for patients with small invasive or non-invasive malignancies, and those needing prophylactic mastectomies. Despite outstanding postoperative cosmetic results, nipple-areola complex (NAC) and mastectomy skin flaps (MSF) survival remains a concern, with nipple excision secondary to partial or total necrosis been noted in up to 30% of the cases following nipple-sparing mastectomies (NSM).1-4 The two-stage nipple-areola preserving (NAP) mastectomy, aims to decrease the rate of NAC loss and MSF necrosis following conservative mastectomies.

MATERIAL AND METHODS: Seventy patients who underwent NSM due to malignant and benign conditions, were divided into two groups: those who underwent our two-stage NAP mastectomy were matched to the group of mastectomy patients without preservation techniques. Demographic data and postoperative results were retrospectively assessed.

RESULTS: The NAP group comprised 45 flaps (24 patients) and the NSM group comprised 75 flaps (46 patients), with no significant difference in terms of age, BMI or ASA score. None were actively smoking. Mean time between the delay of the flap and breast reconstruction was 17.6 days (range of 10–35 days) in the NAP group. No signs of NAC vascular compromise were observed in the NAP group. Nipple necrosis rates were significantly greater (p=0.0136) in the NSM group. Two patients within the NAP group required nipple excision at the time of their mastectomies after biopsies performed at the time of the NAC delay were positive for malignancy or atypia.

CONCLUSION: Vascular delay techniques favor the blood supply of a tissue following a surgical wound, effectively improving the survival of the NAC and MSF after nipple-sparing mastectomies.

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