



Background

- Nipple-sparing mastectomy (NSM) associated with
 - Higher patient satisfaction
 - Improved body image
 - Better psychosocial adjustment
 - Acceptable locoregional recurrence rates <5%
- Breast cancer population increasingly > 60 years old
- However, NSM is less frequently offered to elderly
- No published literature regarding outcomes specifically in older patients
- **AIM: Evaluate NSM outcomes in patients over age 60**

Methods

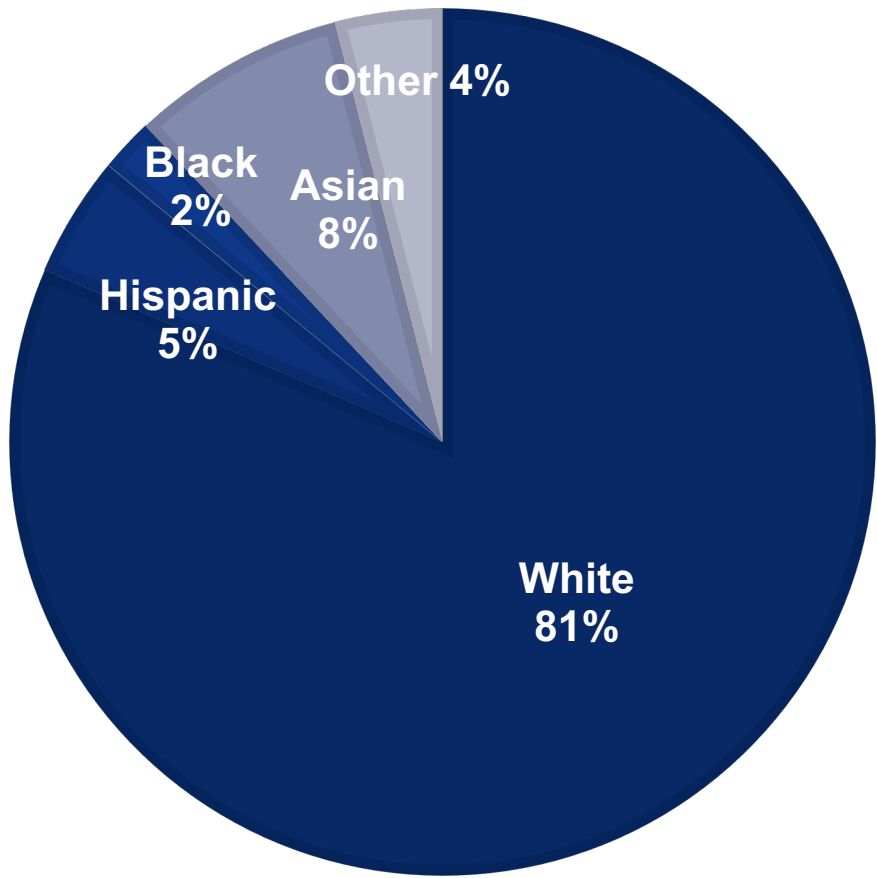
- Retrospective review of NSM patients over age 60 from 2004-2022 at UCSF Breast Care Center
- Evaluated demographic, intra-operative, and post-operative variables including skin necrosis and locoregional recurrence

Results

- 136 women → 200 mastectomies
- Mean age 65.2 ± 4.7 years (range 60-86 years)
- Mean BMI 25.0 ± 4.7
- Mean follow up 3.4 ± 2.5 years (range <1 year to 14 years)

Demographics

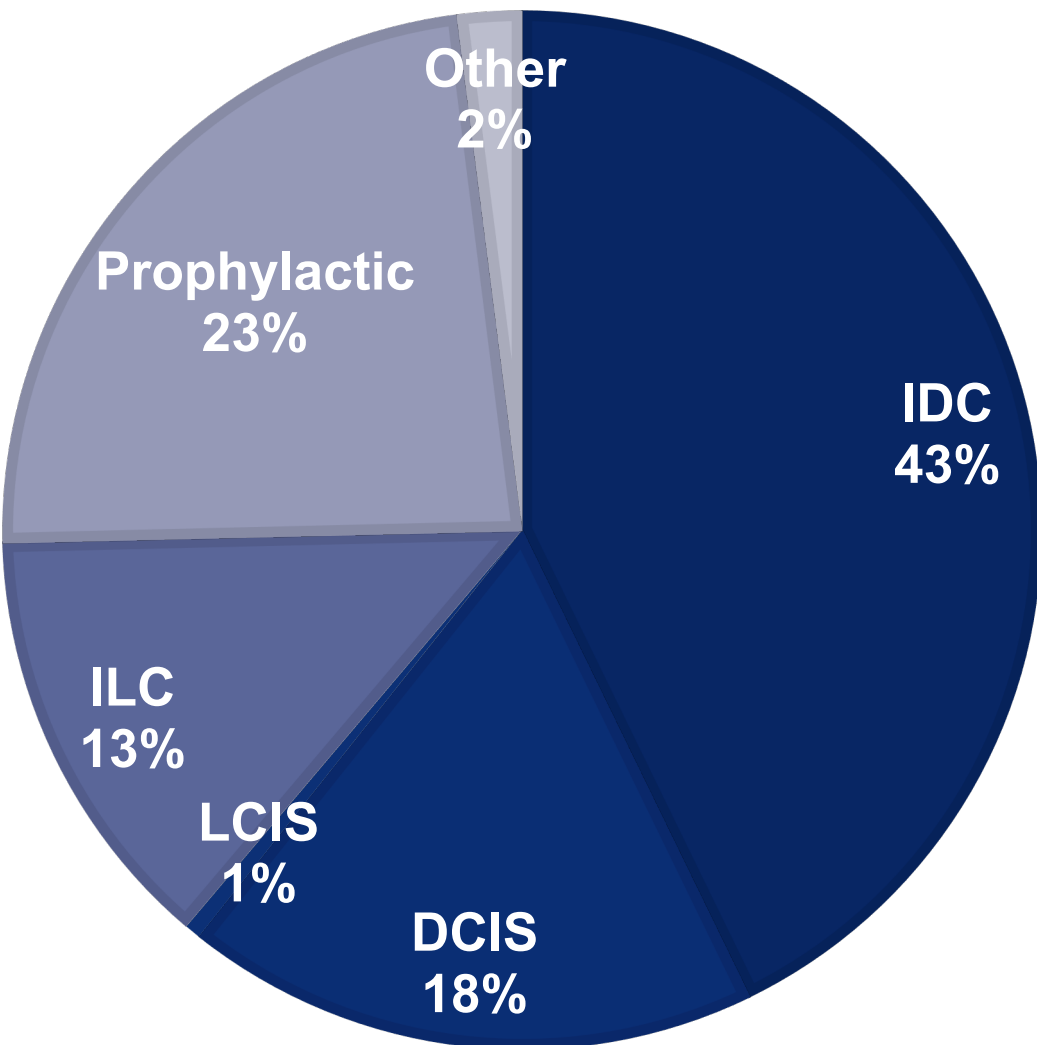
Race



Comorbidities

Hypertension	68 (34.0)
Coronary Artery Disease	9 (4.5)
Hyperlipidemia	56 (28.0)
Diabetes	22 (11.0)
Current Smoker	6 (3.0)

Cancer Dx/Tx



Neoadjuvant Chemotherapy	31 (15.5)
Adjuvant Chemotherapy	52 (26.0)
Prior Radiation	35 (17.5)

Surgery

Mastectomy Incision	
Inframammary Fold	129 (64.5)
Periareolar	69 (34.5)
Vertical Wise Limb	2 (1.0)
Immediate Tissue Expander	182 (91.0)
Subpectoral Plane	134 (67.0)
Prepectoral Plane	48 (24.0)
Immediate Autologous	3 (1.5)
No Reconstruction	15 (7.5)
Axillary Node Biopsy	123 (61.5)

Recurrence

Cancer Recurrence	13 (6.5)
Local Recurrence	6 (3.0)
Distant Recurrence	7 (3.5)
Metastatic Disease	10 (5.0)
Follow Up (Mean Years $\pm$ SD)	3.4 $\pm$ 2.5

Binary Logistic Regression for any complication, infection, wound breakdown, cancer recurrence [Covariates= Age, BMI, HTN, DM, CAD, HLD, chemotherapy, radiation, invasive disease (IDC, ILC)]

- **Prior radiation increased odds of any complication 2.9x (p=0.009)**
- **Prior radiation increased odds of infection 5.7x (p=0.001)**
- **Diabetes increased odds of wound breakdown by 9x (p=0.004)**

Post-Op

Infection Any	38 (19.0)
Hematoma	4 (2.0)
Seroma	12 (6.0)
Mastectomy Flap Necrosis	7 (3.5)
Nipple Necrosis	8 (4.0)
Unplanned OR	33 (16.5)
OR for Wound Breakdown	19 (9.5)
Explanted Tissue Expander	23 (11.5)
Any Complication	69 (34.5)
Final Reconstruction	
Implant	141 (70.5)
Autologous	20 (10.0)

Discussion

- Similar outcomes among older patients over age 60 compared to prior data, institutional and literature
- Locoregional recurrence of 3% in acceptable range
- Diabetes and radiation significantly increased odds of complications (comorbidities may differ in older patients)
- Age alone should not preclude applicable patients from being offered NSM
- Surgery = the single most important factor for Breast Cancer Specific Survival (BCSS) in older patients
- Elderly women should be offered NSM if oncologically safe

Future Directions

- Increased sample size of NSM > 60 years
- Propensity-matched cancer control comparison to younger patients

References

- Mesdag, V., et al., Nipple sparing mastectomy for breast cancer is associated with high patient satisfaction and safe oncological outcomes. J Gynecol Obstet Hum Reprod, 2017. 46(8): p. 637-642.
- Didier, F., et al., Does nipple preservation in mastectomy improve satisfaction with cosmetic results, psychological adjustment, body image and sexuality? Breast Cancer Res Treat, 2009. 118(3): p. 623-33.
- Dent, B.L., et al., Nipple-areolar complex ischemia after nipple-sparing mastectomy with immediate implant-based reconstruction: risk factors and the success of conservative treatment. Aesthet Surg J, 2014. 34(4): p. 560-70.
- Giroto, J.A., J. Schreiber, and M.Y. Nahabedian, Breast reconstruction in the elderly: preserving excellent quality of life. Ann Plast Surg, 2003. 50(6): p. 572-8.
- Sisco, M., et al., The quality-of-life benefits of breast reconstruction do not diminish with age. J Surg Oncol, 2015. 111(6): p. 663-8.
- Tesarova, P., Breast cancer in the elderly-Should it be treated differently? Rep Pract Oncol Radiother, 2012. 18(1): p. 26-33.
- Cortadellas, T., et al., Surgery improves survival in elderly with breast cancer. A study of 465 patients in a single institution. Eur J Surg Oncol, 2015. 41(5): p. 635-40.