

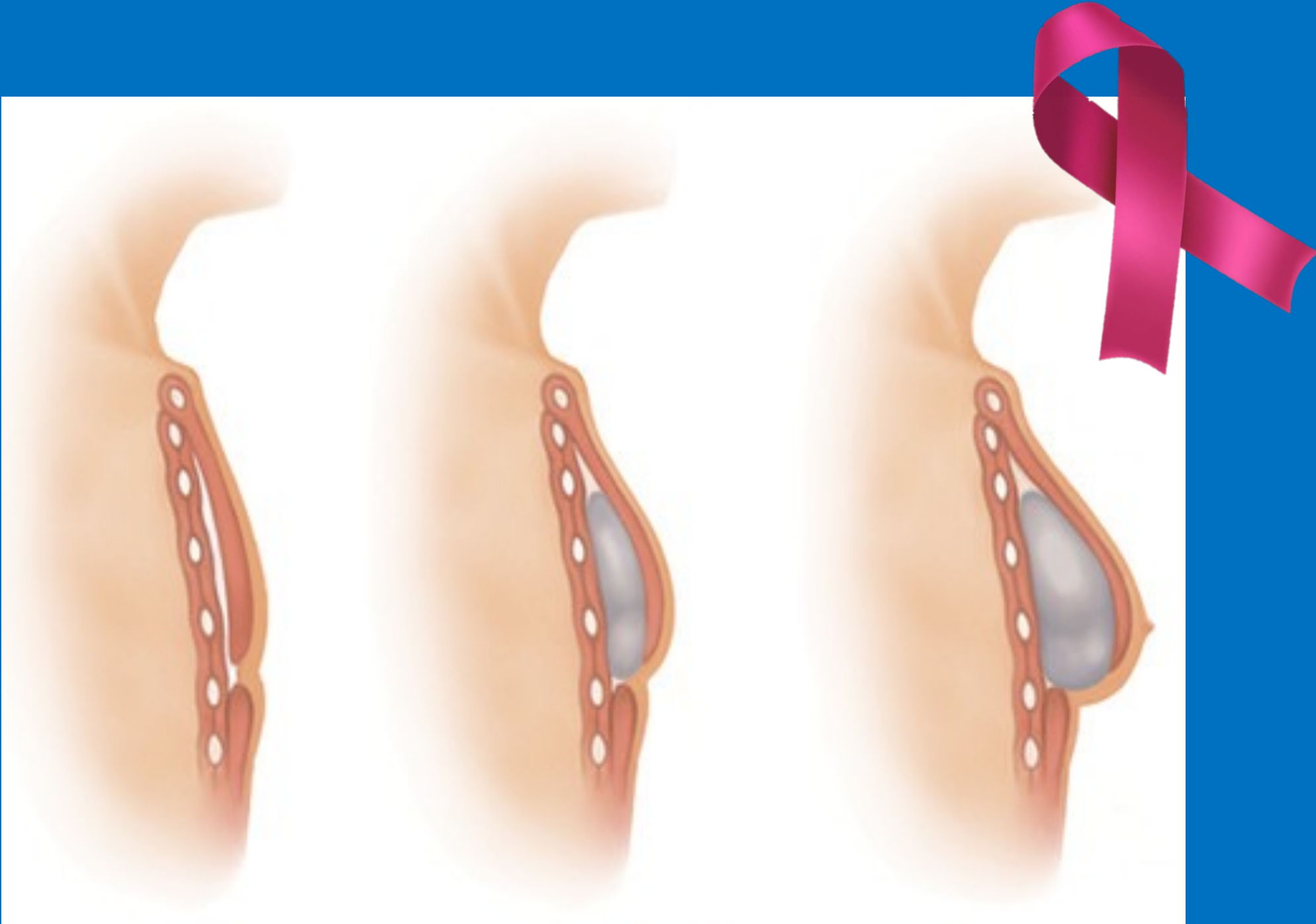
BACKGROUND

Breast Reconstruction

Restoration of **patient's sense of self** and improvement of physiological well being.

Time-line of reconstruction and **planning of additional surgeries** can play a large role in the decision-making process.

Revision rates can be around **30-40%**.



PURPOSE

Identify variables that effect elective revision rate in breast reconstruction

- Variables of Interest
- Demographics

Mastectomy type

Reconstruction modality and timing

Complications

METHODS

Retrospective study of breast cancer patients undergoing reconstruction

Revision: elective surgery performed outside the standard reconstructive algorithm

Revision Rate = % of Patients

January 2007 – December 2017

Minimum 5 year follow up

Multivariable logistic regression and paired Student's t-Test (p<0.05)

RESULTS

Factors that Effect Revision Rate

Demographics		Revision Rate	Treatment Modalities	n	Revision Rate	OR (p-value)
Age (average)	53.5		Mastectomy Types			
BMI (average)	27.6		Nipple Sparing	104	16 (15.4%)	-
Race			Skin Sparing	513	93 (18.1%)	0.85 (0.65)
White	740	17.9%	Total Mastectomy	123	22 (17.9%)	0.71 (0.46)
Black	22	27.3%	Radiation	203	45 (22.1%)	1.04 (0.89)
Other	5	0.2%	Adjuvant Chemo	195	45 (23.1%)	1.89 (0.02)*
Diabetes	41	34.1% (p = 0.04)*				
Smoker	59	20.3%				

Revision Surgeries (total revisions = 174)

Revisions	Frequency
Recontouring or repositioning of flap	78 (44.8%)
Fat grafting	69 (39.7%)
Implant exchange/removal	37 (21.2%)
Scar revision / dog-ear excision	24 (13.8%)
Repositioning of implant	16 (9.2%)

Population Size = 775 patients

Number who underwent revision = 137 patients (17.7%)

Reconstruction	n	Revision Rate	OR (p-value)
Autologous	187	39 (20.9%)	
TRAM	137	29 (21.2%)	-
DIEP	26	6 (23.1%)	
Latissimus + TE	129	23 (17.8%)	0.61 (0.19)
Implant Based	453	73 (16.2%)	0.51 (0.03)*
TE	428	62 (14.5%)	
DTI	18	6 (33.3%)*	
Complications	171	41 (24%)	1.52 (0.12)

CONCLUSIONS

Associated with Increased Revision Rates

Diabetes

Chemotherapy

Direct-to-implant (compared to reconstruction with TE)

Associated with Decreased Revision Rates

Implant based recon (compared to autologous or Latissimus flap)