



### **ORAL PRESENTATION GROUP 3 – PRESENTATION 3**

#### **Re-Excision Rate after Partial Mastectomy in Oncoplastic Breast-Conserving Surgery: A Single Institutional Experience and Review of the Literature**

Presenter: Martin Benjamin, MD

Co-Authors: Catherine J. Sinnott, MD, Sheina Bawa, MD, David I Kaufman, MD, FACS, Katie Guarino, PA, Tommaso Addona, MD, FACS

Affiliation: Nassau University Medical Center / Long Island Plastic Surgical Group, PC, Garden City, NY

**BACKGROUND:** Applying oncoplastic techniques to breast conservation therapy is believed to improve cosmetic and oncologic outcomes, compared to standard breast conservation therapy alone. This study aimed to perform a comprehensive review of the literature comparing outcomes of oncoplastic breast conservation therapy (BCT+R) to that of standard breast conservation therapy alone (BCT). A secondary objective was to compare these results to outcomes after oncoplastic breast conservation therapy performed at our institution (BCT+r).

**METHODS:** A literature search was performed in PubMed using key words, “oncoplastic,” “partial breast reconstruction,” and “breast conservation therapy.” Case reports, case series and studies with less than 10 patients and studies that did not report re-excision rates were excluded. A retrospective chart review was performed from 2011 to 2017 of all cases of oncoplastic breast conservation therapy performed at our institution by a single two-surgeon team consisting of one breast surgeon and one plastic surgeon. Outcomes were assessed by comparing re-excision rates between the three comparison groups (BCT, BCT+R, BCT+r).

**RESULTS:** The BCT group was made of 5965 patients (22 papers) and the BCT+R group comprised 2564 patients (41 papers). Re-excision rates in the BCT+R group were lower (4.0%) than the BCT group (17.2%,  $p=0.0001$ ). 172 patients comprised the BCT+r group and underwent oncoplastic breast conservation therapy during the study period at our institution. The re-excision rate in the BCT+r group was 1.7% and was significantly lower than the BCT group ( $p=0.0001$ ) and lower but not significantly different from the BCT+R group ( $p=0.2113$ ).

**CONCLUSIONS:** Oncoplastic breast conservation therapy leads to lower re-excision rates compared to standard breast conservation therapy. Oncoplastic breast conservation therapy may

improve oncologic outcomes compared to standard breast conservation therapy by allowing for more extensive resection without compromising aesthetic results.

1. Carter S. et. Al. Operative and Oncologic Outcomes in 9861 Patients with Operable Breast Cancer: Single-Institution Analysis of Breast Conservation with Oncoplastic Reconstruction. *Ann. Surg Onc.* 2016(23): 3190-3198.
2. Gladden AH, Sams S, Gleisner A et. al. Re-excision rates after breast conserving surgery following the 2014 SSO-ASTRO guidelines. *Am. J Surgery.* 2017(214):1104-1109
3. Kaviani, et. Al. Oncoplastic surgery in breast conservation: a prospective evaluation of the patients, techniques and oncologic outcomes. *Am J. of Surg.* 2014; 208(5) 727-734.
4. McCahill L, Single RM, Bowles EJ et. al. Variability in Reexcision Following Breast Conservation Surgery. *JAMA.* 2012 (307): 467-475.
5. Weber W. et. Al. Current Standards in Oncoplastic Breast Conserving Surgery. *Breast.* 2017(34):578-581.