

## 315 (PB-110)

Poster

**Bibliometrics trends in oncoplastic surgery and breast reconstruction from 1980 to 2016**

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**Background:** The bibliographic contribution of each country, over the last decades, to the publications on breast oncoplastic and reconstructive surgery is still unknown and it may be an important indicator of interest and scientific development in this field. This article aimed to define bibliometric indicators about research on oncoplasty and breast reconstruction.

**Material and Methods:** A literature search was conducted of the PubMed database to identify papers published between 1980 and 2016 using the terms "reconstructive breast cancer surgery" and "oncoplastic breast cancer". A total of 2,786 abstracts were retrieved. Of these, 1,521 papers met the inclusion criteria. Statistical analyses were performed using SPSS and GraphPad Prism6.0. Data are presented as mean, standard deviation, frequencies, percentages, and political world map. Statistical comparisons were analyzed using Student test, chi square and correlation coefficient (R). The p-values below 0.05 were considered statistically significant.

**Results:** There was a sharp increase in publication over the years, from 0 in 1980 to 109 in 2016 ( $y = 3.84$ ,  $R^2 = 0.79$ ,  $p < 0.01$ ). Most articles ( $n = 1,197$ ; 78.8%) were on total breast reconstruction, and the remaining on partial reconstruction (oncoplasty). The mean impact factor was 2.44 (+5.08). The mean of citations per paper was 3.67 (+5.85). In America, USA published 612 (40.3%) articles, followed by Canada - 37 (2.4%), and Brazil - 22 (1.4%). In Europe, Italy published 124 (8.2%) articles, followed by England - 116 (7.6%), France - 89 (5.9%) and Germany - 68 (4.5%). In Asia, Japan published 62 (4.1%) articles, followed by China - 21 (1.4%). In Oceania, Australia published 36 (2.4%) articles. In Africa, Turkey published 16 (1.1%) articles. There were 1,035 papers (68.1%) written by plastic surgeons, 447 (29.4%) by breast surgeons, and 26 (1.7%) by radiologists. The speciality of the first author was unknown in 12 (0.8%) cases. Plastic and Reconstructive Surgery was the journal with more published papers ( $n = 308$ , 20.3%), followed by Annals of Plastic Surgery ( $n = 166$ , 10.9%), Journal of Plastic, Reconstructive & Aesthetic Surgery ( $n = 97$ , 6.4%) and The Breast ( $n = 60$ , 3.9%). The language was English in 1,380 (90.8%) publications, French in 35 (2.3%) and German in 31 (2.0%).

**Conclusion:** Number and quality of publications on breast reconstruction increased over the years, over the world, over different medical specialties, and it may reflect the importance and interest of this field.

**No conflict of interest**

## 316 (PB-111)

Poster

**Breast reconstruction using modified inferior dermal flap, implant, and nipple areola complex repositioning technique. Experience at MISR Cancer Center**

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**Background:** Immediate breast reconstruction is routinely used for mastectomy candidate patients at MISR Cancer Center. Due to the patient preferences and advanced professional patient care. More and more cosmetic expectations are demanded every other day. Inferior dermal flap with implant is widely practiced. We added modification to this procedure using the autologous tissue as an inferolateral local sling, avoiding the costs in the low resource setting and reducing the morbidity of lengthy operating time. After using this modification many patients avoided a second procedure for subsequent nipple reconstruction and re-positioning that will decrease further appointments and costs.

**Method:** This study involved 24 patients (29 breasts) previously treated at our center from September 2014 to August 2016. Skin markings and a suitable nipple areola complex position is suggested. Reconstruction was performed following a periareolar skin deepethelialization to obtain the new nipple areola complex position. A Wise pattern skin incision and an inferior deepethelialized dermal sling was sutured to the pectoralis major to form a pocket for a silicone implant. And the nipple areola complex was sited at the time of reconstruction, with biopsies taken from retroareolar tissue before proceeding with the procedure.

**Results:** Patient average age was 51 years (range 38–64). 11 mastectomies were for invasive carcinoma, 8 for ductal carcinoma in situ, 5 for lobular carcinoma, and 5 of 19 mastectomies were prophylactic (3 high risk and 2 Atypical lobular hyperplasia). Average operative time was 150 min.

There were no immediate complications requiring reoperation. All retroareolar biopsies were benign and no locoregional recurrences have occurred. 4 nipples had partial superficial necrosis of the lower pole but healed with conservative treatment. No patients required any subsequent procedures to their reconstructed breast.

**Conclusion:** The modified inferior dermal flap with implant and nipple areola complex re-positioning is an excellent one stage reconstruction option. This method presents a potentially safe, trusted, and aesthetically accepted outcome for Egyptian women with large and ptotic breasts.

**No conflict of interest**

## 317 (PB-112)

Poster

**Implant-based Mesh Supported Breast Reconstruction: Patient Reported Outcome Data (PRO-BRA trial, TiLOOP® Bra) and Perspectives**

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**Background:** Implant based reconstruction (IBR) techniques constitute the majority of reconstructive surgeries in Germany. This is currently performed with placement of the implant in a subpectoral pocket beneath the pectoralis muscle. Using IBR techniques with a need for internal support to reconstruct the inframammary fold, to cover the implant at the lower pole and to provide a stable but flexible implant position became of relevance and led to the introduction of heterologous material such as acellular dermal matrices and synthetic meshes. Patient reported outcome is the most relevant factor and BreastQ [Pusic AL; 2006] the most valid and reliable measurement of QoL aspects in important domains used in clinical routine.

**Material and Methods:** Because the PRO is the most relevant factor reflecting the overall satisfaction from a patient perspective a prospective surveillance study with BreastQ-scales at 12 mths. as primary endpoint was conducted (2013) and full recruitment was finished July 2016 ( $n = 269$ ). Cosmetic outcome was evaluated by two independent physicians. To date, results of an interim analysis including all pts. (357 reconstr.) completing the 6 mths. FU is available.

**Results:** Almost all surgeries were primary reconstructions (95.5%) and NSSM (96.4%). The most frequent incision was inframammary ( $n = 195$ ), followed by T-shaped ( $n = 72$ ). The average age of the pts. was 49 yrs (19–77); BMI was 23.1 (16.6–40.4), 77.7% were non-smokers. Percentage of neoadjuvant chemotherapy was 29% and 9.7% received prior radiotherapy. Radiotherapy showed no significant influence on the BreastQ. Severe events occurred in 148 cases. The most frequent complications were necrosis ( $n = 20$ ), wound dehiscence ( $n = 15$ ), and capsular fibrosis ( $n = 9$ ); 22 pts. dropped out. The 4 scores of BreastQ were nearly the same pre- and postoperative after 6 mths: satisfaction with breast changed from 62.8 +/- 23.3 to 60.2 +/- 16.4; psycho-social well-being from 68.3 +/- 19 to 71.3 +/- 20.4; sexual well-being from 59.2 +/- 18.3 to 56.4 +/- 21.4; satisfaction with outcome at 6 mths FU was 74.8 +/- 19.8 and satisfaction with surgeon 90.4 +/- 16.2. Assessing the cosmetic outcome the experts' rated to be very/somewhat satisfied with alignment in 85.7% and 76.1%, with equal size in 81.4% and 78.9%, with look in 85.5% and 74.4%, with similarity in 74.3% and 76.1%, and with size in 97.3% and 84%.

**Conclusions:** The PRO-BRA study revealed consistent good BreastQ scores at the 6 months FU compared to the preoperative values. Furthermore, the assessment by the experts shows a very/somewhat satisfying cosmetic outcome to more than 70% in all of the evaluated items. Although the safety and breast aesthetics of this approach are well recognized prepectoral techniques adds a whole new dimension with the development of the next generation specific for prepectoral implant placement created titanized implant pockets.

**Conflict of interest:** Other Substantive Relationships: Honorare, Reisekosten und Unterstützung wissenschaftlicher Veranstaltungen.